

ALBERTA
AGRICULTURAL
REPORTS

1911-14

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ANNUAL REPORT

OF THE

DEPARTMENT OF AGRICULTURE

OF THE

PROVINCE OF ALBERTA

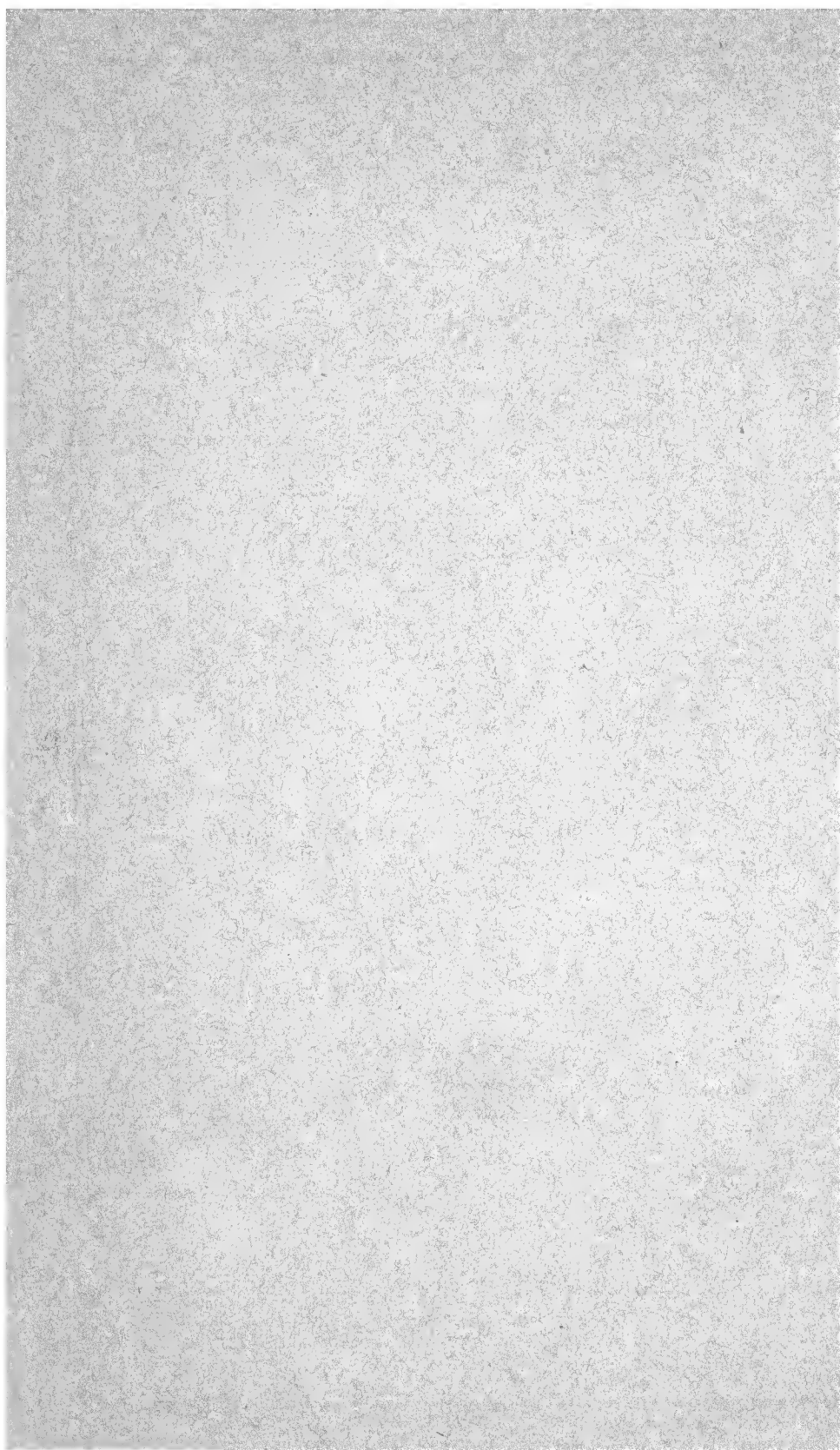
1911

PRINTED BY ORDER OF THE LEGISLATIVE ASSEMBLY



EDMONTON

J. W. JEFFERY, GOVERNMENT PRINTER
1913



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DEPARTMENT OF AGRICULTURE,
EDMONTON, January 18, 1912.

To His Honour

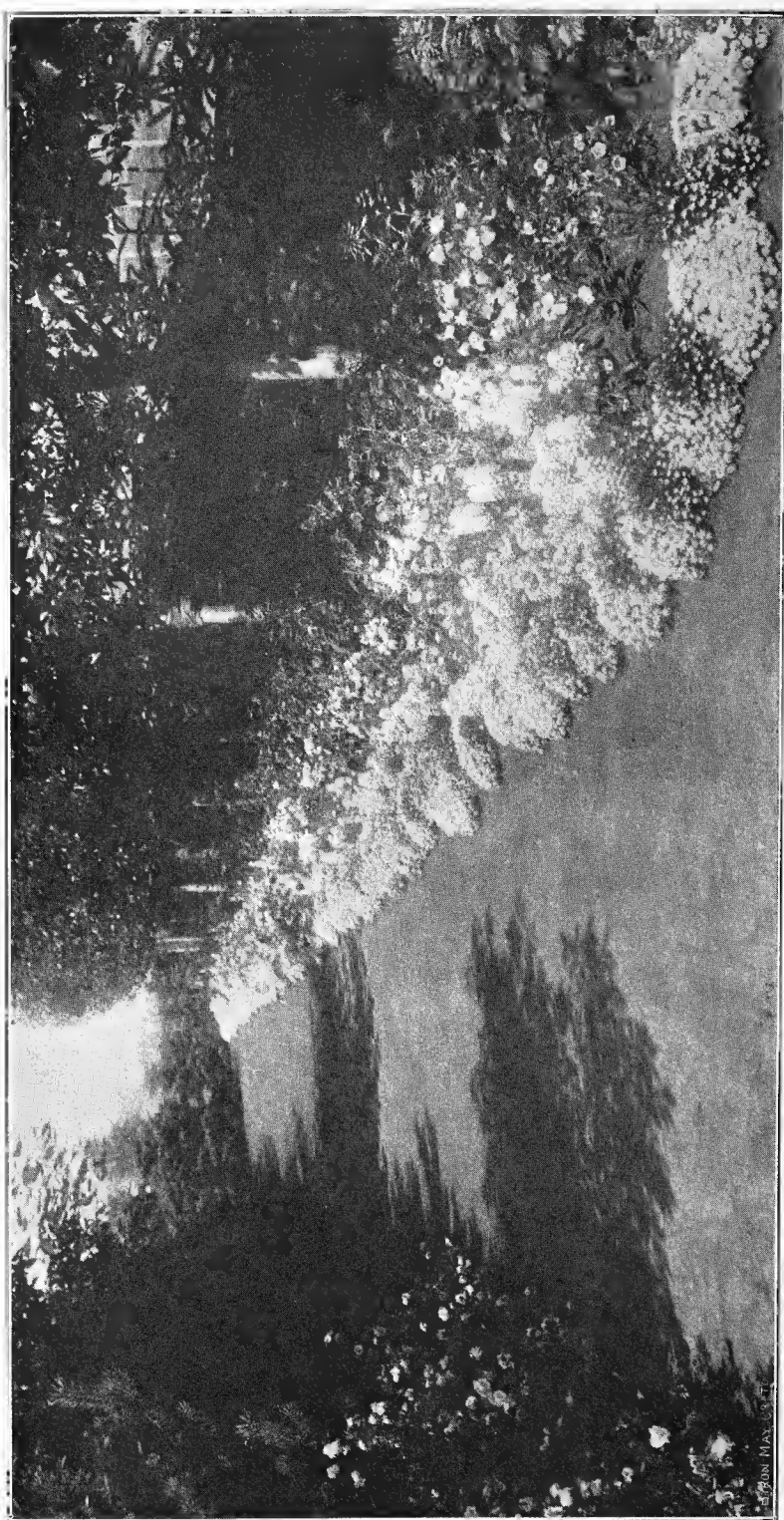
GEORGE HEDLEY VICARS BULYEA,
Lieutenant Governor of the Province of Alberta.

SIR,—

I have the honour to submit herewith the Report of the
Department of Agriculture for the year 1911.

I have the honour to be, Sir,
Your obedient servant,

DUNCAN MARSHALL,
Minister of Agriculture.



PATH ON THE NURSERY PLOT AT THE GOVERNMENT BUILDINGS, EDMONTON.

REPORT
OF THE
DEPARTMENT OF AGRICULTURE

DEPARTMENT OF AGRICULTURE,
EDMONTON, January 15, 1912.

HON. DUNCAN MARSHALL,
Minister of Agriculture.

SIR,—I have the honour to submit herewith a report covering the work of the various branches of the Department of Agriculture for the year 1911. For convenience the report is arranged as follows:

1. Report of the Deputy Minister.
2. Report of the Dairy Commissioner.
3. Report of the Superintendent of the Seed and Weed Branch.
4. Report of the Game and Fire Guardian.
5. Report of the Poultry Superintendent.
6. Report of the Recorder of Brands.
7. Report of the Superintendent of Fairs and Institutes.
8. Report of the Live Stock Commissioner.
9. Report of the Provincial Medical Officer of Health.
10. Report of the Provincial Sanitary Engineer.
11. Report of the Director of the Provincial Laboratory.
12. Report of the Publicity Bureau.
13. Report of the Superintendent of Demonstration Farms.
14. Appendices—
 - a*—Report of the Alberta Horse Breeders' Association.
 - b*—Report of the Alberta Cattle Breeders' Association.
 - c*—Report of the Alberta Natural History Association.

I have the honour to be, Sir,

Your obedient servant,

GEO. HARCOURT,
Deputy Minister of Agriculture.

1.—REPORT OF THE DEPUTY MINISTER.

SIR,—For convenience in dealing with the general work of the department not placed under the supervision of one of the branches, it is thought best to group this work under the following headings:

1. Live Stock.
 2. Crops.
 3. Vital Statistics.
 4. Miscellaneous.
-

1.—LIVE STOCK

Stock came through the winter in very good shape considering that they were a little on the thin side when they went into winter quarters. The season was a very favourable one. The abundant rains produced a luxuriant growth of grass which put all classes of stock into fine condition.

The present season has been an excellent one for horses. The crop of foals was a good one, and prices have ranged high throughout the whole year.

While the cattle came through the winter in rather poor condition, and the dry weather of the spring was unfavourable for early pasture, yet the continued rains made the pastures so luxuriant that cattle were soon in exceptionally fine condition. In fact, many dealers claim that Alberta cattle went on the market in the fall in better condition than for a number of years. Prices for prime cattle were very good. Owing to the abundance of hay and of winter fodder with the prospect of a large amount of cheap grain for feed, a larger number of cattle were put up for winter feeding than in any past year.

The market for hogs was good throughout the year and prices high. There was little disease, and on the whole they were exceptionally healthy.

Sheep came through the winter in excellent shape with a very small loss of about 1 per cent. The lamb crop was good, averaging from 85 to 90 per cent. The most noticeable feature of the sheep industry during the year was the movement on the part of farmers in the central parts of the province to purchase small bunches of sheep.

The season was a very favourable one for the poultry industry. Prices throughout the year for both eggs and dressed birds were maintained at high levels.

The excellent pasture throughout the summer was of great assistance to the dairy industry in that the flow of milk was kept up unusually well. The make of butter last year is the largest in the history of Alberta, and at the same time prices were comparatively high. Fodder of all kinds is abundant for winter feeding and there should be a good yield of milk during the winter.

The report of the Live Stock Commissioner deals with general conditions of the stock industry, and fuller details of the season's work will be found therein.

ENROLLMENT OF STALLIONS.

The provisions of The Horse Breeders' Ordinance require the owner of every stallion, who stands his horse for profit or gain, to have him enrolled in the books of the department. Under the authority vested in him by the Ordinance the Minister of Agriculture has decided that only those stallions recorded in the stud book kept under the authority of, or those foreign stud books approved and recognized by, the Canadian National Live Stock Records of Ottawa, shall be eligible for enrollment as purebred stallions.

These Canadian stud books are as follows:

Clydesdale Stud Book of Canada.
 Canadian Hackney Stud Book.
 Canadian Shire Horse Stud Book.
 Canadian Percheron Stud Book.
 Canadian Thoroughbred Stud Book.
 Canadian Belgian Draft Stud Book.
 French Canadian Horse Breeders' Stud Book.
 Canadian Pony Stud Book.
 Canadian French Coach Stud Book.
 Canadian Suffolk Horse Stud Book.
 Canadian Standard Bred Stud Book.

The following foreign stud books are recognized by the Canadian National Live Stock Records and stallions possessing registration in these records will be entitled to enrollment in the books of the department as purebred:

Cleveland Bay Stud Book.
 Yorkshire Coach Horse Stud Book.
 American Morgan Register.
 American Saddle Horse Register.
 Ostfriesisches Stutbuch.
 Stutbuch der Munsterlandisch-Oldenburgischen Geest.
 Oldenburger Stutbuch.
 Gestutbuch der Holsteinischen Marschen.

Grade certificates are issued for horses which are not of pure breeding, and those horses recorded in unrecognized stud books.

The enrollment of stallions for the year 1911 shows a slight increase over that of the previous year. The following is a summary:

Clydesdales	127
Belgians	16
French Coach.	1
German Coach	4
Hackney.	5
Percheron	82
Shire	7
Suffolk Punch.	9
Standard Bred	19
Thoroughbred.	4
Total enrollment of Pure Breds .	274
Total enrollment of Grades	206
Grand Total	480

The above figures show an increase of 10 per cent. in the number of pure bred enrollments over that of the year 1910, and a decrease of 8½ per cent. in the number of grade enrollments. It is interesting to note that this is the largest number of purebreds and the smallest number of grades enrolled in the department within the last six years. Owners not standing their stallions for service are not required to enroll their horses, consequently the following summary does not represent the total number of stallions in the province as there are many most excellent ones in the hands of breeders:

TOTAL ENROLLMENT OF STALLIONS IN PROVINCE.

BREED	YEAR						
	1904-5	1906	1907	1908	1909	1910	1911
Clydesdale	93	81	86	95	101	125	127
Percheron	26	35	56	52	54	65	82
Standard Bred	10	10	15	15	20	14	19
Shire...	14	10	18	11	11	12	7
Hackney....	6	2	8	8	10	5	5
French Draft	6	5	2	8	5	0	0
Thoroughbred	4	10	8	6	5	10	4
Suffolk	3	3	4	6	4	4	9
Belgian...	1	2	9	5	3	10	16
French Coach	4	2	0	4	3	2	1
German Coach	0	0	2	2	0	0	4
American Saddle Horse	0	0	0	1	0	1	0
Cleveland Bay	0	1	0	0	0	0	0
French Canadian	0	1	0	0	0	0	0
Hunter	0	0	0	0	0	1	0
Total Pure Breds	167	162	208	213	216	249	274
Total Grades	249	329	334	269	231	225	206
Total Enrollment	416	491	542	482	447	474	480

Total enrollment in seven years, Pure Bred . . . 1,215 1,489

Total enrollment in seven years, Grade . . . 1,637 1,843

Total . . . 2,852 3,332

ANIMALS RUNNING AT LARGE.

Under this heading is grouped a report on the workings of four Ordinances, namely: The Stray Animals Ordinance, dealing with the disposal of animals found on the premises of parties other than their owner; The Entire Animals Ordinance, providing for the safety of breeding stock on the open range by prohibiting the running at large of stallions over one year, and bulls over nine months old; The Herd Ordinance (applicable only in a limited area), providing for the fencing in of all stock during the crop season, thus reducing the amount of fencing required; and The Pound District Ordinance, under the provisions of which farmers in well settled districts can regulate the running at large of all animals by impounding those not under proper control and assessing damages where it breaks through a lawful fence.

With the rapid settlement that is taking place everywhere, and the large amount of fencing erected, the operation of these Ordinances is becoming more difficult as they do not nearly meet present day requirements. With the near approach of the time

when municipalities will be formed it was not thought advisable to make any extensive alterations. It is hoped that at an early date each rural municipality will have full power to decide all questions pertaining to the running at large of all animals within its borders.

THE STRAY ANIMALS ORDINANCE.

During the year brand readers were appointed wherever it was found necessary to have them. Generally speaking the work of these men has proven very satisfactory.

The following brand readers have been appointed:

NAME	ADDRESS
John A. Burke	Ferry Point.
A. J. Hills . . .	Daysland.
Perry Hubbell	Edensville.
C. D. Brownfield	Brownfield
Geo. T. Campbell	Wanda.
Andrew Leslie.	Duhamel.
Ovide Blouin	Ferry Point.
H. N. Lockwood	Provost.
Norman Blatchford	Innisfree.
Ed. G. Symington	Provost.
C. W. Mickle	Spring Bank.
Henry Frey.	Barons.
Neil Nicholson	Granum.
Percy Kneechaw	Gaetz Valley.
N. Frank Austin	Cardston.
R. A. Pilling	Cardston.
N. Neilson	Taber.
Percy W. Rubbra	Carstairs.
W. B. Thorne .	Aldersyde.
C. Nixon	Manfred.
G. H. Bawtinheimer	Red Deer.
Henry Brace	Notre Dame de Savoy.
Jas. S. Parker	Mountain View.
David J. Witwer	Acme.
Thos. H. Dengan	Nanton.
Wm. Ross	Round Hill.
Thos. Sigurdson	Solheimia.
A. J. Cameron	Ghost Pine Creek.
W. K. Evans	Three Hills.
Peter McElroy	Nanton.
E. Miller.	Strome.
Walter Sharpe	Sedgewick.
L. N. Bull	Hastings Coulee.
E. S. Stanley	Gilby.
O. A. Hastings	Hastings Coulee.
R. V. Campbell	Daysland.
C. H. Schneider	Flagstaff.
J. F. Harris .	Flagstaff.
T. J. Coppock	Inglet n.
George Scott	Okotoks.
A. E. Hunter	Clareholm.
John Wright	Monarch.
Lawrence Doyl	Carmanagay
D. A. Hart .	Ohaton.
Donald Smith	Evarts.
Thos. J. Ross	Clive.
A. C. Smith	Wahamun.
Elias Pilling	Leavitt.
Harvey Kibbe	Edberg.
Noah Wakeford	Gladys
Oliver Gibbon	Erskine.
Jas. Tees . . .	Valley City
E. J. Thorne	Aldersyde.
Jas. B. Erickson	Camrose.

NAME	ADDRESS
Geo. Bourque	Earling.
Geo Blackly	New Sarepta.
Geo. Todd.	Thigh Hills.
H. C. Sparby.	Bawlf.
Arthur R. Bond	Loma.
Levi Ayotte.	Champion.
F. S. Newman	Hand Hills.
Fred Mason.	Hand Hills.
J. S. Reynolds.	Cereal.
Clarence N. Guynup.	Hillsdown.
Archie Neil McKinnon.	Leslieville.
John A. Swanson	Trochu.
J. H. McArthur	Melverton.
Thomas Moore	Trochu.
N. W. Goodwin	Perbeck.
C. A. Hogan	Galahad.
Ole Lundell ..	Ferry Point.
Edward T. Dahl	Czar.
J. R. Adams..	Lougheed.
Walter R. Joy	Boyne Lake.
Blair McGregor	Vermilion.
Jas. T. Brady..	Mannville.

The number of estray animals advertised in the official Gazette shows a slight decrease for the past year. While the number of animals actually sold by the justices of the peace shows a larger percentage than those sold in the same period last year.

During the year 707 head of cattle, 444 head of horses, 2 sheep, and 8 swine were advertised in the supplement to the official Gazette. Of this number 190 head of cattle, 116 horses, 2 sheep, and 4 swine were sold. The remainder of those advertised were reclaimed by the owners.

Following is a statement showing the number of animals sold, when, by what justice, amount received, and amount forwarded to the department. The money received is placed in a trust fund and may be obtained by the owner upon his proving to the satisfaction of the department that he is the rightful owner.

SALES OF ESTRAY ANIMALS UNDER THE STRAY ANIMALS ORDINANCE, FROM JANUARY 1st TO NOVEMBER 30th, 1911.

JUSTICE	ADDRESS	CLASS OF ANIMAL	Date of Capture	First Gazette Notice	Date of Sale	Procs of Sale	Sent to Department
Adley, C B..	Flagstaff.	Steer, brindle, white stripe on right side, white on belly, left ear cropped, no visible brand.....	Dec. 13, 1910	Mar. 31, 1911	July 24, 1911	\$12.00	\$.08
Anderson, P. B	Bardo...	Mare, gray, or white, weight about 1,200 pounds, dark feet, no visible brand.....	Dec. 1910	Mar. 15, 1911	May 29, 1911	87 00	73 00
Bertrand, F. G.	Blackie, ..	Steer, stag, red, white face, no brand visible.....	Nov 1908	Sept. 30, 1910	Feb. 21, 1911	43 00	28 25
Blackwood, A. S.	De Winton....	Gelding, bay, star on forehead, two white hind feet, about 9 years old, branded S bar under on left shoulder, very unsatisfactory.....	May 5, 1910	Apr. 30, 1911	Aug. 8, 1911	175.00	166.30
" "	"	Gelding, brown, stripe in face, hind legs white, about 7 years old, branded S bar under, on left shoulder, poor brand.....	May 5, 1910	Apr. 30, 1911	Aug. 8, 1911	192.50	183.40
Blair, R. F.....	Dewberry..	Mare, dark gray, four years old, blemished on right hind foot, left hind foot partly white, about 1,000 pounds, no brands visible....	July 1909	Jan. 31, 1911	July 7, 1911	42 00	26 20
Burton, A. W.....	Rubstone.....	Mare, bay, pony, stu in forehead, stripe in face, about 800 pounds, 3 or 4 years old, branded lazy reversed T followed by H, monogram, right shoulder.....	May 12, 1911	July 31, 1911	Aug. 23, 1911	82 00	75.95
Booth, Arnold.....	Amisk ..	Steer, red, 3 years old, no visible brand.....	July 1910	Feb. 15, 1911	June 26, 1911	45 00	28.05
Burwash, A. P.	Ponoka...	Cow, aged, red, branded 2 V lower quarter circle under.....	Nov. 15, 1910	Nov. 30, 1911	Feb. 11, 1911	27 00	9.54
" "	"	Steer, red and white, no visible brand, tip of tail, and rump and flank white....	June 1910	Dec 31, 1910	Feb 11, 1911	13 00	..
" "	"	Calf, heifer, white spot on right stifle, colour red, no brand visible.....	Nov. 23, 1910	Dec 15, 1910	Feb. 11, 1911	10 00	..
" "	"	Steer, white, 2 years old, right ear split, left ear marked, no brand visible....	Nov 1, 1910	Nov. 14, 1910	Feb. 11, 1911	27 00	9.16
" "	"	Cow, light red, white spot on flank, dehorned, rope on neck, no brand visible....	Dec. 1910	Dec. 31, 1910	Mar. 4, 1911	24 00	6.95
" "	"	Heifer, Hereford, brockle face, using 3 years old, branded S S on right rump.....	Dec. 1910	Dec. 31, 1910	Mar. 3, 1911	17 00	..
Campbell, Fred....	Ferry Point	Cow, red, large, white in face, wild, branded T E bar under, on right hip, calf at side.....	Dec. 4, 1910	Dec. 31, 1910	Feb. 20, 1911	31 00	1 90
" "	"	Cow, red, horns tied in, white end of tail, about 3 years old, no brand visible....	Nov. 15, 1910	Jan. 31, 1911	Mar. 2, 1911	17 00	1 05
" "	"	Heifer, roan, one year old, little white on belly, no brand visible.....	Nov. 15, 1910	Jan. 31, 1911	June 3, 1911	14.50	..
" "	"	Steer, roan, 4 years old, left ear off tip, right ear, little white on forehead, branded L followed by spittoon, with 2 P lower quarter circle under, under the L spittoon, on right hip.....	Dec. 12, 1910	Mar. 31, 1911	June 17, 1911	36 00	26.50
" "	"	Heifer, white, red head and neck, about 18 months old, no brand visible.....	Nov 15, 1910	Mar. 15, 1911	June 17, 1911	16 00	5.00
" "	"	Heifer, red, 3 years old, very small, little white under belly, small horns, branded monogram J M bar over, right thigh.....	Dec. 14, 1910	Mar. 31, 1911	June 17, 1911	24.50	15.40
Campbell, R. B.	Olds	Steer, red and white, 2 years old, has horns, no brand visible.....	Nov. 15, 1910	Dec. 31, 1910	Mar. 18, 1911	15 00	.....
Carruthers, P..	Grassy Lake	Horse, light bay, gelding, about 1,400 pounds, about 9 years old, indistinct brand on right shoulder, stripe in face, white hind foot.....	Nov. 20, 1910	Dec. 31, 1910	Mar. 11, 1911	190 00	179.00

DEPARTMENT OF AGRICULTURE

SALES OF ESTRAY ANIMALS UNDER THE STRAY ANIMALS ORDINANCE, FROM JANUARY 1ST TO NOVEMBER 30TH, 1911.—Continued.

JUSTICE	ADDRESS	CLASS OF ANIMAL	Date of Capture	First Gazette Notice	Date of Sale	Procs'ds of Sale	Sent to Department
Cornelle, C. G.	Camrose	Cow and calf, all red, cow, branded T reversed N quarter circle down under, on right ribs	June 30, 1910	Oct. 31, 1910	Jan. 14, 1911	\$20 00	\$ 4 15
"	"	Heifer, red, white under belly, tip of tail white, rising 2 years, small horns, no brand visible	Oct. 31, 1910	Nov. 31, 1910	Feb. 23, 1911	18 00	1 50
"	"	Steer, red, some black on head and neck, about a year old, no brand visible	July 1, 1910	Feb. 15, 1911	Apr. 26, 1911	9 00	
"	"	Gelding, white, about 900 pounds, about 12 years old, branded (dot 1 L) script on left shoulder	Jan. 17, 1911	Feb. 15, 1911	Apr. 24, 1911	32 50	16 05
"	"	Gelding, white, top half of tail gray, about 10 years old, about 800 pounds, no brand visible	Jan. 17, 1911	Feb. 15, 1911	Apr. 24, 1911	32 50	16 05
Charham, P.	Halknuk.	Horse, bay, hind legs white, spot in forehead, about 900 pounds, branded (C 6 Y) on left shoulder	Nov. 10, 1910	Dec 15, 1910	Mar. 8, 1911	54 00	38 15
"	"	Colt, mare, about two years old, hind feet white and right front foot white, strip in face, spot on nose, no brand visible	Feb. 1, 1911	Mar. 15, 1911	Sept. 3, 1911	67 50	52 11
"	"	Mare, bay, fawn, aged, two hind feet white, left front foot white, when she was a year old, branded (B) over, on right hip	Feb. 1, 1911	Mar. 15, 1911	Sept. 3, 1911	50 00	35 05
Caseley, A	Caseleyville	Pony, mare, black, hind and left front feet white, white face, with an inverted Y branded 3 tooth rake, left shoulder, mane with an inverted Y attached to bottom of orange rake, right over attached, short bar through, also 3 tooth rake, right shoulder	May 1910	Jan. 14, 1911	Mar. 8, 1911	27 00	10 25
"	"	Mare, gray, stripe in face, 10 or 11 years old, about 750 pounds, no brand visible	Feb. 1, 1911	Mar. 15, 1911	May 23, 1911	28 00	
"	"	Mare, filly, bay, 2 years old, no brand visible	Mar. 1, 1911	Mar. 15, 1911	May 23, 1911	22 00	50
Caruthers, N. E.	Lacombe.	Mare, black, 7 years old, about 700 pounds, no visible brand	Feb. 1, 1911	Mar. 15, 1911	May 23, 1911	19 00	
"	"	Two sheep, one with underbit out of left ear, one with overbit out of left ear, and a swallow tail cut out of right ear, both females, mongrel breed, one 8 years old, other 2 years old	May 13, 1911	June 30, 1911	Sept. 9, 1911	4 50	1 10
Davidson, D	Daysland	Mare, bay, about 18 months, white spots, no brand visible	Oct 1, 1909	Jan 15, 1910	Mar. 28, 1911	23 50	8 10
"	"	Steer, red, rising 2 years, white spot over right shoulder, end of tail white, unreadable brand on right ribs	Nov. 15, 1910	Jan 31, 1911	Mar. 28, 1911	23 50	8 10
"	"	Steer, red, 2 years old, white on flanks, unreadable brand on right ribs	Nov. 15, 1910	Jan 31, 1911	Mar. 28, 1911	23 50	8 10
Davie, J. S.	Crossfield	Pig, sow, black, short tail, right ear punched, left ear split	Nov. 15, 1910	Jan 31, 1911	Mar. 28, 1911	23 50	8 10
"	"	Mare, white, pony, branded S E and I S	Nov. 15, 1909	Dec 31, 1910	Nov. 15, 1911	45 50	4 45
"	"	Mare, small breed, sorrel, 3 years old, 3 white feet, stripe on forehead, no brand visible	June 15, 1910	Feb 28, 1911	May 15, 1911	68 00	50 30
"	"	Mare, bay, about 1 1/20 pounds, 8 years old, branded K H, on left shoulder	Nov. 22, 1910	Mar. 31, 1911	June 15, 1911	85 00	79 15
Davies, C. A	Perbeck	Steer, white, 4 years old, no brand visible	Dec. 24, 1910	Jan. 1911	Apr. 17, 1911	46 00	26 33
"	"	Cow, red, white on belly, 3 years old, no brand visible	Dec. 24, 1910	Jan. 1911	Apr. 17, 1911	28 00	13 70
"	"	Heifer, black, 2 years old, branded H or inverted 4, 9, lower half diamond under, on right ribs	Dec. 24, 1910	Jan. 1911	Apr. 17, 1911	18 50	4 44

	Pembroke Crossfield	Description	Dec 24, 1910	Jan 1911	Apr 17, 1911	6 00
Davies, C. A.	"	Calf, yearling, spotted red and white, built, no brand visible	June 1910	Nov 15, 1910	Feb. 8, 1911	3 00
Davey, J. S.	Alix "	Mare, aged horn carcase nearly blind, deformed from foot, branded lazy B and L2B under, on right hip	Aug 1, 1910	Nov. 30, 1910	Mar. 7, 1911	40 00
Darlow, G. H.	"	Horse, black & white legs, white face, 3 years old, no brand visible	Dec 13, 1910	Dec 31, 1910	Mar. 9, 1911	17 00
"	"	Steer, roan, yearling, no brand visible	Dec 13, 1910	Dec 31, 1910	Mar. 9, 1911	19 00
"	"	Heifer, roan, 3 years old, both ears off, no brand visible				
"	"	Steer, red and white, 5 years old, P lowered cut in left ear, branded 4 J bar over, on left hip, and P 9 lower half diamond under, on right hump				
"	"	(Calf, red and white, no brand visible (bull)	Dec 13, 1910	Dec 31, 1910	Mar. 9, 1911	65 00
"	"	Steer, roan, 2 years old, one horn off, no brand visible	Dec 13, 1910	Dec 31, 1910	Mar. 9, 1911	16 00
"	"	Heifer, black, 3 years old, one horn off, no brand visible	Dec 13, 1910	Dec 31, 1910	Mar. 9, 1911	27 00
"	"	Steer, red and white, one year old, right ear off, no brand visible	Dec 13, 1910	Dec 31, 1910	Mar. 9, 1911	21 50
Doughty, L. M.	Content	Steer, red, bob tail, horns sawn off, branded V cross hamess, half diamond under, on tight ribs, using 3 years old	Dec 13, 1910	Dec 31, 1910	Mar. 9, 1911	20 00
"	"	Steer (fox), about 6 years old, dehorned, bundle, white along sides of belly, red in centre of belly, small spot in face, ring in nose, end of right ear cut square, branded Y V bar under, on left thigh	Jan. 10, 1911	Feb. 28, 1911	Apr. 29, 1911	21 00
"	"	Steer, red, little white on belly, little white on flanks, ends of ears fringed, no brand visible				
"	"	Horse, black horse cult, no brand visible	Jan. 15, 1911	Feb. 14, 1911	Apr. 21, 1911	18 00
Duffus, A.	Calgary.	Horse, roan mare, branded 7 bar C connected, on right shoulder, and blotched brand which looks like lazy W connected by quarter circle, on left thigh..... stubby horns, no brand visible.....	Dec 1, 1910 Jan 23 1910	Jan 14, 1911 Feb. 15, 1910	May. 15, 1911 Feb. 17, 1911	20 00 26 00
Edgeworth, A	Foreman	Steer, red, brockle faced, 4 years old, stubby horns, no brand visible.....	Jan 25, 1910	Feb. 15, 1910	Feb. 17, 1911	76 00
"	"	Gelding, brown, branded H 2 monogram, 7 H monogram over, on left shoulder	Aug 10, 1910	Dec. 15, 1910	Feb. 22, 1911	30 00
"	"	Gelding, light bay, white hind feet, stripe on nose, had halter on, branded M on left shoulder	Aug. 10, 1910	Dec. 15, 1910	Feb. 22, 1911	147 .50
Fleming, A. W	Ohaton..	Steer, red, mulley, 3 years old, branded bar 2 inverted Y with lower half circle over the Y attached to stem, looks like double Y with five slanting lines inside half circle, on right ribs, last part of brand blurred....	Aug 10, 1910	Dec. 15, 1910	Feb. 22, 1911	135 00
"	"	Steer, red and white, coming 2 years old, scar on right flank, left ear notched, no tail, no brand visible	July 1908	Dec 15, 1910	Feb. 18, 1911	43 00
Fletcher, R. W	Burdett..	Horse, brown, snail, about 900 pounds, small star in forehead, all ears split, branded lazy S, S bar under, on right shouldeir, M on left shoulder, and a heart brand on top of an open box, on left thigh	May 1, 1910	Dec 31, 1910	Feb. 25, 1911	16 00
"	"	Horse, riding, dark gray, about 4 years old, about 1,100 pounds, two white hind feet, no brand visible	June 15, 1910	Aug. 31, 1910	Feb. 4, 1911	42 00
Nanton..	"	Mule, bay.....	Mar. 11, 1911	Mar. 31, 1911	Apr. 28, 1911	139 00
"	"	Cow, red, small horns, cropped ears, 7 years old, no brand visible, and calf	July 1910	Nov 15, 1910	Feb. 11, 1911	20 00
Fetherston, T. W	"	Mare, black, branded square on left shoulder	June 1, 1910	Oct. 15, 1910	Jan 27, 1911	20 00
"	"	Horse, roan, strip in face, three white feet, about 1,100 pounds, no brand visible	Apr. 18, 1909	Feb. 28, 1911	June 5, 1911	12 00
"	"	Cow, red and white spotted, white face, no brand visible.....	Apr. 18, 1909	Apr. 30, 1911	July 13, 1911	15 00
Brownfield.....	"	Cow, red and white spotted, white face, no brand visible.....	Feb. 1, 1911	Feb. 28, 1911	May 29, 1911	36 00

Melin, O. C.	Calmar	Horse, brown, gelding, white spot on forehead, one white hind foot, about five years old, about 1,100 pounds, indistinct brand	Oct. 1, 1910	Dec. 15, 1910	Feb. 18, 1911	141 30	121.60
"	"	Mare, buckskin pony, about 700 pounds, black legs to knees, black line along back, tail cut to hocks, about 7 years old, no brand visible	Oct. 1, 1910	Dec. 1, 1910	Feb. 25, 1911	35 00	17.85
"	"	Heifer, one year old, red, broad horns shaped like a Durham, no brand visible	Dec. 15, 1910	Jan. 31, 1911	Apr. 1, 1911	17 30	2.65
Mortimer, S.	Claresholm	Mare, bay, star in face, snip on nose, off hind foot white, gray hairs in top of tail, weight about 900 pounds, branded X with bar across the top connection, the two members of the letter bar over with a small dot on the bar	July 30, 1910	Aug. 15, 1910	Mar. 20, 1911	41 00	30.85
"	"	Mare, bay, weight about 900 pounds, about 16 years, no brand visible	Aug. 1, 1910	Mar. 15, 1911	June 17, 1911	14 00	6.70
"	"	Horse, black, pony, branded lazy H	Nov. 15, 1910	Aug. 1909	Jan. 14, 1911	20 00	9.03
"	"	Steer, branded deer head	Mar. 15, 1910	...	Mar. 20, 1911	20 00	...
"	"	Cow, branded square with H inside of it and X resting on top of the square	May 15, 1910	Dec. 31, 1910	Mar. 2, 1911	47 00	28.03
"	"	Horse, black, four white feet, branded monogram T inverted, T followed by lazy T, on right hip, and upper quarter circle, on right shoulder	...	Feb. 15, 1911	May 29, 1911	19 50	78
"	"	Heifer, red, 3 years old, branded E A N, on right ribs	...	June 31, 1911	Aug. 26, 1911	50 00	35.41
"	"	Horse, gray, mare, about 9 years old, scar on right hip, or it might be a blurred brand	Jan. 1, 1911	Feb. 15, 1911	Apr. 27, 1911	25 00	9.40
"	"	Steer, red, grade, Hereford, mark on left ear, face and belly white, no brand visible	Jan. 1, 1911	Feb. 15, 1911	Apr. 20, 1911	16 00	8.30
"	"	Heifer, two years old, red, white feet and belly, no brand visible	May 1, 1910	Oct. 15, 1910	Feb. 4, 1911	117 00	102.43
"	"	Colt, bay, left hind foot white, white on forehead, scar on left front foot about 3 years old, about 900 pounds, no visible brand	Apr. 15, 1910	Dec. 31, 1910	Mar. 11, 1911	95 00	86.40
"	"	Gelding, blue or black roan, branded lazy L Y monogram, on left hip	May	June 15, 1911	Aug. 26, 1911	110 00	99.15
"	"	Steer, red, about 14 months old	...	Dec. 31, 1910	Mar. 10, 1911	14 00	...
"	"	Steer, red, about 7 months old	...	Dec. 31, 1910	Mar. 10, 1911	10 00	...
"	"	Calves, two heifer calves, about one year old	...	Dec. 31, 1910	Mar. 10, 1911	25 00	...
"	"	One white pig	...	Dec. 31, 1910	Mar. 10, 1911	11 00	...
"	"	Steer, Hereford, 2 years old, white on flanks, no brand visible	Dec. 10, 1910	Dec. 31, 1910	Mar. 25, 1911	36 00	21.00
"	"	Heifer, Hereford, 2 years old, left ear split, red spot under right eye, red, 2 years old, no brand visible	Dec. 10, 1910	Dec. 31, 1910	Mar. 25, 1911	20 00	4.00
"	"	Heifer, small, 2 years old, no brand visible	Dec. 10, 1910	Dec. 31, 1910	Mar. 25, 1911	31 00	15.00
"	"	Steer, red and white, 2 years old, no brand visible	Nov. 15, 1910	Nov. 30, 1910	Feb. 9, 1911	20 00	11.65
"	"	Heifer, black, mulberry white belly, white on hind feet, coming two years, appears to be in calf, no brand visible	Nov. 1, 1910	Mar. 31, 1911	June 20, 1911	15 00	5.90
"	"	Mare, light bay, 2 years old, star on forehead, wire cut near front foot, no brand visible	Dec. 1, 1910	Dec. 30, 1910	Mar. 10, 1911	17 00	1.40
"	"	Heifer, red, white spot on forehead, white on belly, one white foot, tip of tail white, branded U Y lower quarter circle under, on right ribs	Jan. 21, 1911	Feb. 28, 1911	Mar. 1, 1911	16 25	...
"	"	Steer, red, rising 4 years, branded Y U bar over, and inverted U under, the U on right ribs	Jan. 1911	Feb. 15, 1911	Apr. 26, 1911	39 00	22.52
"	"	Alix	...	...	...	...	...

DEPARTMENT OF AGRICULTURE

SALES OF ESTRAY ANIMALS UNDER THE STRAY ANIMALS ORDINANCE, FROM JANUARY 1ST TO NOVEMBER 30TH, 1911.—Continued.

JUSTICE	ADDRESS	CLASS OF ANIMAL	Date of Capture	First Gazette Notice	Date of Sale	Procs'ds of Sale	Sent to Department
Pinnell, F.	Alix	Heifer, red, horns sawn off, two years old, branded X 2 upper half diamond under, on left hip.	Jan. 1911	Feb. 15, 1911	Apr. 26, 1911	\$19.00	\$ 3.50
"	"	Steer, red and white, rising 3 years old, branded reversed C or a right half circle, 4 bar under, on right hip.	Jan. 1911	Feb. 15, 1911	Apr. 26, 1911	16.00	2 15
"	"	Heifer, two years old, red, branded X 2 upper half diamond under, on left hip.	Jan. 1911	Feb. 15, 1911	Apr. 26, 1911	18.00	4 10
"	"	Heifer, light red and white, rising 3 years, branded 1 3 V on right ribs.	Jan. 1911	Feb. 15, 1911	Apr. 26, 1911	10.00	...
"	"	Cow, red, white belly, white tip on tail, white feet, branded H quarter circle up over a little to the right, on left hip, cow is very old.	Jan. 1911	Feb. 15, 1911	Apr. 24, 1911	20.00	4 35
"	"	Heifer, red and white, about a year old, no brand visible.	Jan. 1911	Feb. 1, 1911	Apr. 24, 1911	7.00	...
Pythouse, H. G.	New Surepta	Mare, gray, about 9 years old, no brand visible.	Oct. 1, 1910	Dec. 31, 1910	Feb. 25, 1911	27.00	10 15
Plunkett, G. D.	Pinchei Creek	Horse, bay gelding, Clyde, weight about 1,000 pounds, 4 white feet, stripe in face, branded D with small C 9 over, on left thigh.	June 1910	May 31, 1911	July 13, 1911	196.00	183 50
"	"	Mare, gray, about 1,100 pounds, branded R on right shoulder and right thigh, and J B on left shoulder.	Nov. 1910	June 15, 1911	Aug. 26, 1911	77.00	71.80
"	"	Heifer, black, one year old, white face, no brand visible.	Nov. 1910	June 15, 1911	Aug. 26, 1911	58.00	48.05
"	"	Heifer, red, one year old, spot in face, no brand visible.	Nov. 1910	June 15, 1911	June 3, 1911	14.25	...
"	"	Gelding, gray, 6 years old, no brand visible.	Nov. 1910	June 15, 1911	June 3, 1911	9.25	...
"	"	Mare, cold, dark bay, two white hind feet, 3 years old, branded 1111 lazy B over, on right hip.	Nov. 1910	June 15, 1911	Apr. 4, 1911	50.00	33 70
"	"	Heifer, red and white, bob tail, end of ears frozen off, eighteen months, no brand visible.	Jan. 1, 1911	Mar. 31, 1911	June 13, 1911	62.00	50.25
"	"	Heifer, red, mulley, 18 months old, branded 78 and 0 with a cross through it on right ribs.	Jan. 1, 1911	Mar. 31, 1911	June 13, 1911	62.00	50.25
"	"	Cow, red, 4 years old, no brand visible.	Dec. 9, 1910	Jan. 14, 1911	Mar. 31, 1911	15.50	70
"	"	Bull calf, gray, advertised with cow as calf at foot.	Dec. 9, 1910	Jan. 14, 1911	Mar. 31, 1911	15.50	70
"	"	Heifer, red, 15 years old, no brand visible.	Dec. 9, 1910	Dec. 15, 1910	Mar. 14, 1911	16.00	1.50
"	"	Cow, red and white, 4 years old, undistinct brand on left shoulder.	Dec. 9, 1910	Dec. 15, 1910	Mar. 14, 1911	25.00	9.84
"	"	Cow, red, stub horns, 4 years old, no brand visible.	Dec. 9, 1910	Dec. 15, 1910	Mar. 14, 1911	42.00	26.40
"	"	Heifer, 18 months old, red, little white on belly, on brand visible.	Dec. 9, 1910	Dec. 15, 1910	Mar. 14, 1911	20.00	8.45
"	"	Heifer, 18 months old, red, little white on belly, on brand visible.	Dec. 9, 1910	Dec. 15, 1910	Mar. 14, 1911	25.00	10.13
"	"	Horse, bay, white socks on hind legs, white on left front foot, white strip on face, white on nose, age about 14 years, weight about 1,100 pounds, branded W A monogram, on left flank, a horse shoe with a bar across, looks like a lazy D, followed by G H, on left jaw.	Dec. 7, 1910	Dec. 30, 1910	Mar. 14, 1911	31.00	16.13
"	"	Heifer, red, mulley, rising 3 years old, white star on face, white behind shoulder and under belly, white on both flanks, bob tail, branded lower half diamond on left ribs.	Nov. 1, 1910	Nov. 15, 1910	Jan. 28, 1911	81.00	60.55
"	"	Heifer, red, mulley, rising 3 years old, white star on face, white behind shoulder and under belly, white on both flanks, bob tail, branded lower half diamond on left ribs.	Dec. 3, 1910	Dec. 31, 1910	Mar. 11, 1911	30.00	10.05

Ross, John	Lacombe	Dec 20, 1910	Dec 31, 1910	Mar 21, 1911	19 00	35
"	"	Dec 20, 1910	Dec 31, 1910	Mar 21, 1911	19 00	35
"	"	June 5, 1910	Jan 15, 1911	Apr 5, 1911	33 50	17 25
"	"	Nov	Jan 31, 1911	Mar 12, 1911	9 00	..
"	"	May 20, 1910	Feb 28, 1911	Apr. 24 1911	34 50	13 30
"	"		Feb 15, 1911	June 7, 1911	26 00	5 65
"	"		Mar 1911	June 9, 1911	16 50	3 05
"	"	Spring, 1910	Mar. 31, 1911	June 10, 1911	20 50	6 80
"	"	Oct 1910	Nov 15, 1910	Jan. 21, 1911	33 00	12 80
"	"	Sept. 19, 1910	Oct 31, 1910	Jan. 21, 1911	20 00	2 90
"	"	Dec 1, 1910	Dec 31, 1910	June 24, 1911	50 50	33 20
"	"	Nov 15, 1910	Feb 28, 1911	Oct. 5, 1911	12 25	35
"	"	Nov. 15, 1910	Feb. 28, 1911	Oct. 5, 1911	12 25	35
"	"	Oct 16, 1910	Dec 15, 1910	Oct. 5, 1911	30 00	17 10
"	"	Oct 16, 1910	Dec. 15, 1910	Oct. 5, 1911	8 00	..
"	"	Oct. 1, 1910	Nov 30, 1910	Feb. 8, 1911	43 00	25 00
"	"		Dec. 31, 1910	Feb. 16, 1911	18 50	2 69
"	"	Nov. 13, 1910	Dec 31, 1910	Feb. 16, 1911	18 25	3 05
"	"	Nov. 10, 1910	Dec 15, 1910	Feb. 18, 1911	17 25	2 59
"	"	Nov 10, 1910	Dec 15, 1910	Feb. 18, 1911	13 75	..
"	"	Nov 8, 1910	Dec 15, 1910	Feb. 18, 1911	27 50	12 59
"	"	Nov 13, 1910	Dec. 15, 1910	Feb. 18, 1911	25 75	10 88
"	"	Nov. 30, 1910	Dec. 15, 1910	Feb. 18, 1911	16 00	1 37
"	"	May 15, 1910	Dec 31, 1910	Feb 22, 1911	18 00	3 30
"	"	Dec. 29, 1910	Dec 31, 1910	Feb. 27, 1911	66 00	48 53
"	"	Nov 24, 1910	Jan. 31, 1911	Mar. 25, 1911	29 75	13 59
"	"	Nov 17, 1910	Dec 31, 1910	Mar 3, 1911	22 00	6 18
"	"	Nov 20, 1910	Dec 31, 1910	Mar 14, 1911	36 00	17 30
"	"	Nov 20, 1910	Dec 31, 1910	Mar. 18, 1911	25 00	8 70
"	"				32 00	16 28

SALES OF ESTRAY ANIMALS UNDER THE STRAY ANIMALS ORDINANCE, FROM JANUARY 1ST TO NOVEMBER 30TH, 1911.—Continued.

JUSTICE	ADDRESS	CLASS OF ANIMAL	Date of Capture	First Gazette Notice	Date of Sale	Procd's of Sale	Sent to Department
Sobey, R. E. . .	High River	Cow, red, white face, 4 years old, branded R 4 attached to the tail of the R and a vertical bar attached to the bottom of the R, on left shoulder, calf at foot	Nov. 12, 1910	Nov. 15, 1910	Jan. 11, 1911	\$28 00	\$17 50
"	"	Cow, brindle, 4 years old, left ear cropped and split, no brand visible, calf at foot	Nov. 12, 1910	Nov. 15, 1910	Jan. 11, 1911	27 00	16.53
"	"	Steer, dark red, 4 years old, star in face, branded round topped on right shoulder, half diamond over, and inverted U attached to bottom of stern of rowlock, on left shoulder	Nov. 12, 1910	Nov. 15, 1910	Jan. 11, 1911	35.00	24.33
Thorne, W. B	Alderayde.	Steer, black, muley, 5 years old, right ear cropped, no brand visible	June 1910	Jan. 31, 1911	Apr. 24, 1911	39 00	21 35
"	"	Mare, steel, aged, star in face, one white hind foot, lame in fore foot, branded open A vented, on right shoulder, J S, on left thigh	Jan. 7, 1911	Jan. 15, 1911	Mar. 24, 1911	16 00	7 55
"	"	Gelding, bay, star in forehead, scar on right thigh, left hind foot white, aged, branded D followed by horizontal bar connected, on right shoulder	Jan. 7, 1911	Mar. 31, 1911	Oct. 2, 1911	20 00	11 40
Tweed, J. G.	Cochrane.	Mare, cayuse, gray, foal at foot, branded J A on left shoulder.	Oct. 29, 1910	Nov. 30, 1910	Feb. 6, 1911	141 00	127 88
"	"	Gelding, cayuse, gray, branded two split keys, points up, on left shoulder	Oct. 29, 1910	Nov. 30, 1910	Feb. 6, 1911	30 00	19 15
"	"	Horse, gray, pony branded newspaper file with T S over, on left shoulder	Apr. 29, 1911	May 15, 1910	July 17, 1911	38 00	27 55
Thompson, C. S. .	Scollard	Mare, bay, white spot in forehead, about 1,250 pounds, about 5 years old, branded a two-letter brand, on left thigh, very dim.	May 1, 1911	June 15, 1911	Sept. 16, 1911	138 00	118 90
Towns, A. A	Haneyville.	Cow, Hereford, long horns, waddle cut in throat about six years old, branded E L lower half diamond under, on left ribs . .	Nov. 1910	Feb. 28, 1911	June 10, 1911	29 00	14 90
"	"	Calf, yearling, Hereford, no brand visible	Nov. 1910	Feb. 28, 1911	June 10, 1911	7 00	.
Wells, Geo. A.	Whitebrush	Steer, yearling, red, small ends of ears off, points of horns off, branded monogram T F followed by 9, with upper quarter circle under, on left hip	Dec. 15, 1910	Jan. 15, 1911	Mar. 25, 1911	24 25	8 45
"	"	Heifer, red and white, white on forehead, about 2 years old, no brand visible.	Dec. 15, 1910	Jan. 15, 1911	Mar. 25, 1911	25 00	9 30
"	"	Mare, brown, stripe in face, hind legs white, about 800 pounds, 7 years old, no brand visible.	Nov. 15, 1910	May 15, 1911	July 17, 1911	47 00	36 00
Wilcox, J. B. . .	Manfred.	Calf, red, ends of ears frozen off, some white underneath, no brand visible	Nov. 1, 1910	Dec. 15, 1910	Feb. 15, 1911	10.75	.
"	"	Heifer, red and white spotted, coming 2 years old, left ear cropped, no brand visible.	Oct. 1910	Dec. 31, 1910	Feb. 23, 1911	14 00	1.30
"	"	Cow, red, 3 years old, no horns, some white in face, white spot on rump, white underneath, notch in left ear, branded S reversed G, upper quarter circle over, on left hip, the first character of the brand looks like S, but it has been branded deep and blotched, and it might be meant for a B	Oct. 1910	Dec. 31, 1910	Feb. 23, 1911	12 60	.
"	"		Fall 1910	Dec. 31, 1910	Mar. 10, 1911	31 00	15.00

Owner	Sex	Age	Color	Markings	Date of Birth	Date of Sale	Price
Wilcox, J. B.	Heifer	red, 1 year old	3 white legs, left ear cropped, no brand visible	Nov. 19, 1910	Dec. 31, 1910	Mar. 10, 1911	14.00
"	Cow	red, mulley, about 10 years	both ears cropped, no other marks or brands visible	Nov. 25, 1910	Dec. 31, 1910	Mar. 1, 1911	36.00
"	Steer	roan, yearling	neck and head nearly red, right ear notched deep, no brand visible	Dec. 20, 1910	Feb. 28, 1911	May 6, 1911	20.00
Worsley, G. S.	Gelding	bay, one hind foot white, 1,000 pounds, white face, no brand visible	Jan. 1, 1911	Feb. 15, 1911	Mar. 15, 1911	Mar. 15, 1911	114.75
Wynn, Robt	Heifer	red and white, 3 years old, branded upper half diamond followed by B, with upper half diamond under, on right hip.				Apr. 4, 1911	3.35
"	Heifer	red and white, 2 years old, no brand visible				Apr. 4, 1911	3.35
Allison, F. E.	Steer	red and white, 2 years old, branded a cross followed by T, followed by split key, corks down, on right ribs.				Apr. 4, 1911	18.95
"	Steer	light red, 2 years old, branded R H monogram followed by a script F, or reversed 3, U upper half diamond over, on left ribs.				Apr. 4, 1911	32.00
Answorth, J.	Cow	red, without horns, about 3 or 4 years old, no brand visible, cow had calf when sold				Apr. 4, 1911	32.00
Bertrand, F. G.	Cow	roan, branded N P 5 on left ribs, vented with lazy 5 Roman 2, on left hip				Apr. 15, 1911	26.50
"	Steer	red, white face, branded J S, on left ribs				Apr. 27, 1911	24.00
Ryley, ..	Bull	calf and a steer calf, both red, no brands visible				May 6, 1911	11.45
Berry Creek	Gelding	bay, 4 years old, white stripe down face, lame in hind foot, branded monogram lazy M over F, on left shoulder				Feb. 21, 1911	24.50
"	Mare	caluse bay, white spot in face, aged about 16 years, branded monogram lazy M, F, on left shoulder, foot at foot				July 5, 1911	20.00
Langdon	Mare	brown, right front fetlock white, some white on right hind leg, about 14 years old, branded reversed S with bean under, on right shoulder				July 5, 1911	20.00
"	Gelding	dark brown, left hind fetlock white, star in forehead, narrow white stripe on nose, about 10 years old, weight about 1,000 pounds, branded D S on right shoulder				Sept. 7, 1911	110.00
"	Gelding	bay, weight about 1,000 pounds, about 10 years old, wire cut on left shoulder, no brands visible				Sept. 7, 1911	105.00
"	Gelding	bay, weight about 1,000 pounds, about 10 years old, no brands visible				Oct. 5, 1911	100.00
Wiste	Mare	bay, white star, white hind foot, four years old, no brand visible				Oct. 5, 1911	110.00
"	Gelding	bay, white star, 3 years old, no brand visible				Sept. 16, 1911	152.50
De Barathy, S	Steer	roan, 3 years old, branded rowlock followed by D, upper half diamond under, on left ribs				Sept. 16, 1911	152.50
"	Steer	roan, 3 years old, branded rowlock followed by D, upper half diamond under, on left ribs				Apr. 5, 1911	30.00
"	Heifer	red, 2 years old, branded inverted Y, O, bar under, on right flank				Apr. 5, 1911	20.00
"	Calf	steer, no brand visible				Apr. 5, 1911	10.00
"	Calf	steer, no brand visible				Apr. 5, 1911	5.00
"	Calf	heifer, no brand visible				Apr. 5, 1911	5.00
"	Steer	white faced, 2 years old, no brand visible				Apr. 5, 1911	15.00
"	Mare	black, colt at foot, 5 years old, 700 pounds, no brand visible				May 10, 1911	72.50
"	"	"					53.55

SALES OF ESTRAY ANIMALS UNDER THE STRAY ANIMALS ORDINANCE, FROM JANUARY 1ST TO NOVEMBER 30TH, 1911.—Continued

JUSTICE	ADDRESS	CLASS OF ANIMAL	Date of Capture	First Gazette Notice	Date of Sale	Procs of Sale	Sent to Department
De Barathy, S.	Trochu	Steer, roan, coming 3 years old, branded J T bar under, on left side.	Nov. 1910	Dec. 15, 1910	May 10, 1911	\$30 00	\$13 05
"	"	Cow and calf, red, tangy, no brand visible	Nov. 1910	Dec. 15, 1910	May 10, 1911	25 00	8 15
"	"	Heifer, red and white, coming 2 years old, branded R N lower half circle over, on right shoulder	Jan. 1911		June 26, 1911	12 00	
"	"	Steer, 4 years old, red and white, branded C arrowhead pointing to right, bar over, on right ribs	Jan. 1910	Jan. 31, 1911	June 30, 1911	15 00	55
"	"	Calf, yearling, black, no brand visible, heifer	Jan. 1910	Jan. 31, 1911	June 26, 1911	7 00	
Disher, Geo. H.	Chipman	Gelding, large, black, no brand visible	Dec. 1910	Mar. 15, 1911	May 15, 1911	50 00	32 10
Figaro, T. G.	Leo.	Calf, yearling, roan, no brand visible	Feb. 4, 1911	Mar. 15, 1911	May 29, 1911	10 00	
"	"	Calf, yearling, sucking cow, branded E T upper half diamond over, on left hip	Feb. 4, 1911	Mar. 15, 1911	May 29, 1911	8 00	
"	"	Cow, red, about 5 years old, branded E T upper half diamond over, on left hip	Feb. 4, 1911	Mar. 15, 1911	May 29, 1911	20 00	4 70
"	"	Steer, red, 3 years old, undercut left ear, branded reversed R followed by B monogram, on left ribs	Feb. 1, 1911	Mar. 15, 1911	Aug. 24, 1911	44 00	28 30
"	"	Steer, 2 years old, horned, red and white, left ear cut, branded script E T half diamond over, on left hip	Feb. 1, 1911	Mar. 15, 1911	Aug. 24, 1911	30 00	14 55
"	"	Cow, red, about 5 years old, has horns, branded script E T half diamond over, on left hip	Feb. 1, 1911	Mar. 15, 1911	Aug. 24, 1911	28 00	12 72
Hunter, W. F.	Strome.	Steer, 2 years old, red, spot on belly, no brands visible	Oct. 1, 1910	Feb. 28, 1911	May 15, 1911	20 00	4 55
Kulnke, F.	Ferintosh	Heifer, yearling, roan, bluish on right hind leg, has horns, no brand visible	Dec. 13, 1910	Dec. 31, 1910	Feb. 18, 1911	9 00	
"	"	Heifer, black, coming 3 years old, has horns, and bob tail, no brand visible	Dec. 13, 1910	Dec. 31, 1910	Feb. 18, 1911	25 50	10 55
"	"	Heifer, calf, roan, has horns, tip of left ear off, branded 11 11 5 on right ribs	Jan. 14, 1911	Jan. 31, 1911	Mar. 25, 1911	13 00	
"	"	Cow, dehorned, red, white faced, large, no brand visible	Jan. 14, 1911	Jan. 31, 1911	Mar. 25, 1911	35 50	14 72
Kelly, J. F.	Lindsyville	Heifer, 2 years old, very small, roan, dehorned, no brand visible	Oct. 10, 1910	Jan. 31, 1911	Mar. 25, 1911	14 00	
Kealy, O. W.	Medicine Hat	Two pigs, white, no brands	Apr. 25, 1911	May 25, 1911	Apr. 12, 1911	14 00	
Lavcock, J. L.	Gleichen.	Mare, gray, very old, and stiff, in front, no brand visible	June 1, 1911	Aug. 15, 1911	Aug. 9, 1911	20 00	
"	"	Gelding, black, little white in face, about 1,200 pounds, no brand visible	June 1, 1911	Aug. 15, 1911	Oct. 9, 1911	25 00	18 20
"	"	Gelding, black, star in forehead, 9 or 10 years old, about 1,400 pounds, branded H 8 on left thigh	June 1, 1911	Aug. 15, 1911	Oct. 9, 1911	145 00	135 05
"	"	Gelding, small bay, two white hind feet, star in forehead, no brand visible	July 1, 1910	July 15, 1911	Oct. 10, 1911	175 00	165 80
"	"	Cow, red, some white on belly, stubby horns, branded U T, the top of the T being inside or running through the U, with A under a little to the left, on left hip	Dec. 1, 1910	May 31, 1911	Sept. 5, 1911	25 00	18 20
Lyons, G. R. D.	Castor	Cow, black, muley, some white on head, white on belly, branded R on right shoulder	Apr. 10, 1910	Dec. 31, 1910	Mar. 10, 1911	32 00	13 70
Laidlaw, J. K.	Lochend.		Feb. 1911	Mar. 15, 1911	June 2, 1911	11 00	4 38

Lochend.	Laidlaw, J. K.	Cow, red, branded M Y on left thigh, 8 months old calf at foot	Feb.	1911	Mar. 15, 1911	June 2, 1911	11 00
Canrose	Laizon, F. P.	Mare and calf, bay mare, small star on forehead, branded T H	Nov 15, 1907	Dec. 1910	1910	July 28, 1911	76 00
"	"	On left shoulder, colt at foot	Nov 15, 1907	Dec. 1910	1910	July 28, 1911	50 00
"	"	Horse, mare, black, star on forehead, branded R N on left thigh	Nov 15, 1907	Dec. 1910	1910	July 28, 1911	50 00
"	"	Horse, brown, face white, branded T H on left shoulder, R N on left thigh	Nov 15, 1907	Dec. 1910	1910	July 28, 1911	27 00
Castor.	Marthas, E. H.	Mare, bay, about 1,100 pounds, 10 years old, branded 2 bar 1 with 60 under on left thigh...	Aug. 8, 1910	Nov. 30, 1910	Feb. 28, 1911	122 05	
"	"	Gelding, bay, about 1,000 pounds, branded reversed B followed by lazy H connected, on left thigh	Aug. 8, 1910	Nov. 30, 1910	Feb. 28, 1911	84 00	
Andrew.	Mennie, R. H.	Bull, about 8 months old, all white on back, red underneath, red head, white tail, no brand visible...	Dec 10, 1910	Dec. 31, 1910	May 27, 1911	11 00	
Harry Hills	McGowan, C. T.	Cow, about 8 years old, clear brindle, without mark or brand	Dec 10, 1910	Feb. 28, 1911	May 20, 1911	15 00	
Parkland	North, J. T.	Mare, light gray, branded C Y over Z and an upper half circle under the Z S, on left shoulder. The C is vented or ungued be a slip of the branding iron	Nov 1, 1910	Mar. 15, 1911	June 17, 1911	161 35	
"	"	Mare, dark brown, branded inverted J, half diamond under, on left shoulder, weight about 975 pounds...	Oct. 1, 1910	Sept. 30, 1910	June 17, 1911	121 35	
Glengarden	Poole, Edwin.	Mare, gray, six years old, had halter on, no rope, branded 39 bar over, on right hip	Aug. 11, 1910	Feb. 28, 1911	June 3, 1911	57 00	
Nanton	Reagh, F. E..	Brooklee faced cow and calf, about 7 years old, branded two vertical bars with bar through giving it the form of the letter H, bar under brand	Dec. 19, 1910	Dec. 31, 1910	Mar. 9, 1911	45 00	
"	"	Brooklee faced cow, and calf, branded two vertical bars with bar through, giving it the form of the letter H, bar under the brand	Dec 19, 1910	Dec. 31, 1910	Mar. 9, 1911	45 00	
"	"	Cow and calf, brooklee faced, red, branded Y T bar over, on left ribs, blotched brand on left hip	Dec. 19, 1910	Dec. 31, 1910	Mar. 9, 1911	23 00	
Ranfurly	Reid, Wm. J.	Mare, sorrel, stripe in face, about 700 pounds, branded E A on left hip.	Aug. 1, 1910	Dec. 15, 1910	Mar. 25, 1911	93 50	
"	"	Gelding, sorrel, white face, about five years old, branded mono-gram A lazy G, on left shoulder	Aug 1, 1910	Jan. 31, 1911	Mar. 29, 1911	90 00	
Penhold	Speakman, J.	Steer, black, about 2 1/2 years old, no brand visible	Dec. 1, 1909	Jan. 10, 1911	Apr. 8, 1911	20 00	
Wellistale.	Stockwell, G. J.	Steer, red, branded 6 reversed L	Nov. 1, 1909	Jan. 31, 1911	Aug. 10, 1911	4 25	
Dog Pound	Thomson, F. V.	Steer, red and white, 2 years old, no brand visible	Feb. 1, 1910	Jan. 31, 1911	Aug. 10, 1911	21 00	
Cheserwood	Unland, M. H.	Bull calf, red, wire in right ear, no brand visible	Nov. 1, 1910	Dec. 31, 1910	Mar. 7, 1911	8 80	
"	"	Heifer calf, black, wire in right ear, split in left ear, no brand visible	Nov. 1, 1910	Dec. 31, 1910	Mar. 7, 1911	11 00	
"	"	Bull calf, black, wire in right ear, no brand visible	Nov. 1, 1910	Dec. 31, 1910	Mar. 7, 1911	11 25	
"	"	Bull calf, red, wire in right ear, no brand	Nov. 1, 1910	Dec. 31, 1910	Mar. 7, 1911	11 25	
"	"	Heifer calf, red, wire in right ear, no brand	Dec 1, 1910	Dec. 31, 1910	Mar. 9, 1911	2 25	
"	"	Heifer calf, black, wire in right ear, white belly, tip of tail off, bell on, no brand	Dec 1, 1910	Dec. 31, 1910	Mar. 9, 1911	8 00	
"	"	Heifer, calf, red, spot on belly, wire in right ear, no brand visible	Dec 1, 1910	Dec. 31, 1910	Mar. 9, 1911	8 00	
"	"	Steer, one year old, red, spot in forehead, spot between front legs, no horn off, no brand visible	Jan. 27, 1911	Feb 15, 1911	Apr. 17, 1911	15 50	
"	"	Heifer, black and white, has horns, had small bell on, no brand visible...	Jan. 27, 1911	Feb. 15, 1911	Apr. 17, 1911	15 50	
"	"	Steer, red, mulley, one year old, no brand visible	Jan. 27, 1911	Feb. 15, 1911	Apr. 17, 1911	9 50	
"	"	Steer, red and white, has horns, one year old, no brand visible	Jan. 27, 1911	Feb. 15, 1911	Apr. 17, 1911	15 50	
"	"	Steer, red, spot on forehead, white between front legs, no horns, no brand visible.	Jan. 27, 1911	Feb. 15, 1911	Apr. 17, 1911	15 30	

SALES OF ESTRAY ANIMALS UNDER THE STRAY ANIMALS ORDINANCE, FROM JANUARY 1ST TO NOVEMBER 30TH, 1911.—Continued.

JUSTICE	ADDRESS	CLASS OF ANIMAL	Date of Capture	First Gazette Notice	Date of Sale	Proc'ds of Sale	Sent to Department
Wilcher, J. G.	Lewisville.	Steer, red and white, branded K or inverted L, on left hip cannot be made out.	Nov 1910	Feb 28, 1911	Apr. 18, 1911	\$29 00	\$11.20
Borsford, Oscar . . .	Langdon.	Steer, red, three years old, branded very dimly on left side, brands years old, no brand.	Oct. 1, 1910	July 15, 1911	Nov. 25, 1911	43.50	34.58
Baly, H.	Greencourt	Gelding, chestnut, white forehead, two fore legs white, about 8 years old, no brand.	May 15, 1911	June 30, 1911	Oct. 21, 1911	31.00	25.65
Charley, W. R.	Pine Lake.	Gelding, light sorrel, aged, blaze in face, branded 2 M bar over on right hip.	Jan 1911	July 31, 1911	Nov. 1, 1911	12.75	8.28
"	"	Mare, brown, aged, quiet, branded monogram V, inverted V, with a short line extending to left extending from top of figure to the right on left shoulder.	Jan. 1911	July 31, 1911	Nov. 1, 1911	68.00	62.05
"	"	Gelding, black, four years old, no visible brand.	Jan. 1911	July 31, 1911	Nov. 1, 1911	101.00	94.23
Davie, J. S.	"	Filly, brown, 3 years old, no brand visible.	Jan. 1911	July 31, 1911	Nov. 1, 1911	101.00	90.53
"	Crossfield.	Gelding, dark brown, 8 years old, two white hind feet, star in forehead, left hind leg badly blemished, no brand visible.	June 20, 1911	Aug 15, 1911	Nov. 20, 1911	19.50	12.00
Forster, J. W.	Nareby.	Mare, light brown, seven years old, weight 1,000 pounds, branded T L S followed by 1 with a lower half circle under, all on left hip.	July 1910		Nov. 18, 1911	142.00	129.00
Mills, H. D.	Wetaskiwin	Horse, bay, black points, wire cut on right front leg, about 10 years old, branded an axe handle head up, on left shoulder.	Aug 20, 1911	Sept. 2, 1911	Nov. 20, 1911	60.00	51.50
Reid, Wm. J.	Ranfurly..	Mare, bay, aged, sore in front feet, small, chunky, about 750 pounds, branded a cross on right shoulder.	Dec. 1, 1910	Aug. 30, 1911	Nov. 14, 1911	40.50	19.25
Rowell, A. T.	Red Deer.	Gelding, roan pinto, 5 years old, about 750 pounds, white face, 3 white legs, no brand.	Jan 1, 1911	Mar. 15, 1911	May 29, 1911	41.00	24.35
"	"	Steer, roan, 3 years old, branded on right hip a character that looks like a leaf.	Nov. 15, 1910	Feb 28, 1911	May 8, 1911	40.00	25.12
"	"	Steer, red and white, 3 years old, no brand visible.	Nov 15, 1910	Feb 28, 1911	May 8, 1911	33.00	18.30
"	"	Heifer, roan, yearling, no brand visible.	Nov 15, 1910	Mar. 15, 1911	May 8, 1911	16.00	.70
Stacey, Jas.	Magrath.	Cow, 5 years old, red, spots on flanks, little white dot on shoulder, branded 6 2 bar under, on right shoulder.	Feb. 1, 1911	Feb 28, 1911	May 15, 1911	32.00	16.68
"	"	Mare, bay, about 7 years old, star in face, one hind foot white, branded J J on left shoulder.	July 1, 1911	June 30, 1911	Nov. 6, 1911	130.00	119.10
Thorne, W. B.	Aldersyde.	Cow, red, branded tobacco pouch on right shoulder, 9 years old	Apr 3, 1911	June 30, 1911	Oct. 21, 1911	17.00	10.77
"	"	Cow, red, mulley, 8 years old, branded H N bar under, on right shoulder.	Apr. 1908	June 15, 1911	Oct. 21, 1911	21.00	14.67
"	"	Mare, bay, no brand visible.			Oct 21, 1911	17.00	9.88
Tweed, J. G.	Cochrane	Mare, bay, 7 years old, crooked front leg, both hind legs white, about 1,250 pounds, branded W small upper half diamond over, on right shoulder, and a figure resembling an inverted W, poorly made, on left shoulder.	July 15, 1911	July 31, 1911	Nov. 1, 1911	71.00	58.80
Thompson, C. S. . . .	Stollard.	Horse, bay, star in face, wire cut in right hind foot, about 1,400 pounds, aged and very stiff in hind legs, dim brand on left shoulder.		June 15, 1911	Oct. 25, 1911	15.00	8.60

Blackwood, A. S. . . .	De Winton	Gelding, sorrel, star in forehead, rope burn round neck, left fore foot white, badly cut on hind leg, no brand visible	1910	Aug. 30, 1911	Dec. 16, 1911	10 00	1 35
Ball, Henry	Namoo	Gelding, bay, white spot in face, two white hind feet, no brand visible	July 25, 1911	Sept. 15, 1911	Dec. 28, 1911	60 00	47 85
Church, Edwin . .	Youngstown . .	Gelding, gray, six years old, branded 9 A monogram, on left shoulder	June 1910	Apr. 30, 1911	Nov. 25, 1911	60 00	52 85
Campbell, Wm . . .	Holden	Mare, gray, 3 years old, one white hind foot, about 825 pounds, no brand visible	Aug. 1911	Aug. 31, 1911	Dec. 9, 1911	86 00	75 75
"	"	Mare, brown, aged, small star, some white feet, blotched star on left hip, brown two-year-old horse colt by side bearing no brands	Aug. 1911	Aug. 31, 1911	Dec. 9, 1911	80 00	70 25
Duffus, A.	Calgary	Gelding, bay, aged, white star and stripe on nose, off hind foot white, about 1,000 pounds, branded what looks like a three-tined short handled fork, on left shoulder	June 9, 1911	July 15, 1911	Dec. 8, 1911	117 50	108 17
"	"	Mare, mouse coloured, white stripe in face, off hind foot white, white corner on nigh foot, branded C S on right shoulder, and C J connected on left hip	June 9, 1911	July 15, 1911	Dec. 8, 1911	78 00	69 65
"	"	Gelding, brown, 8 years old, no brands visible	June 9, 1911	July 15, 1911	Dec. 8, 1911	65 00	56 97
"	"	Filly, bay, 3 years old, white stripe in face, four white feet, branded monogram reversed E inverted T, on left hip	June 9, 1911	July 15, 1911	Dec. 8, 1911	41 00	33 57
"	"	Mare, bay, white face, off hind foot white, aged, branded 17 bar over, on left thigh, also one yearling colt by side	June 9, 1911	July 15, 1911	Dec. 8, 1911	66 00	57 95
"	"	Mare, sorrel, Hackney, branded L on left thigh and P on right shoulder, the P has a bar through the bottom of it which makes it look a little like P X monogram	June 9, 1911	July 15, 1911	Dec. 8, 1911	91 00	82 32
"	"	Mare, small white face, four white feet, colt by side, mare branded a cross with U close under, on left shoulder, and what looks like a hook followed by reversed L, on right shoulder	June 9, 1911	Aug. 15, 1911	Dec. 8, 1911	60 00	52 10
"	"	Pony, mare, mouse coloured, white stripe in face, 3 white feet, indistinct brand on right shoulder, looks like Y, two-year-old by side	June 9, 1911	Aug. 15, 1911	Dec. 8, 1911	71 00	62 82
"	"	Gelding, chestnut, half white face, two hind feet white, crooked ankle behind, branded 9 P on right shoulder	June 9, 1911	Aug. 15, 1911	Dec. 8, 1911	41 00	33 57
"	"	Mare, gray, blooded, with foal and yearling by side, mare branded what looks like a figure 7 slanting very much to the left, on right shoulder	June 9, 1911	Aug. 15, 1911	Dec. 8, 1911	171 00	160 32
"	"	Pony, gelding, aged, white, branded N C on left hip	June 9, 1911	Aug. 15, 1911	Dec. 8, 1911	35 00	27 72
"	"	Gelding, aged, chestnut, about 15½ hands high, branded J G bar over, on left shoulder	June 9, 1911	Aug. 15, 1911	Dec. 8, 1911	56 00	48 20
"	"	Mare, mouse coloured, aged, no visible brands, colt by side	June 9, 1911	Aug. 15, 1911	Dec. 8, 1911	39 00	31 62
"	"	Mare, brown, two white hind feet, white star, 5 or 6 years old, branded an imperfect 7 on left shoulder, colt by side	June 9, 1911	Aug. 15, 1911	Dec. 8, 1911	70 00	61 85
"	"	Gelding, buckskin, aged, black points, branded K upper half diamond over, on right shoulder	June 9, 1911	Aug. 15, 1911	Dec. 8, 1911	20 00	13 10
"	"	Gelding, black, aged, branded reversed E N monogram, on right shoulder	June 9, 1911	Aug. 15, 1911	Dec. 8, 1911	23 00	16 02
"	"	Gelding, bay, aged, white star, nigh hind foot white, white spot on off fore foot, branded reversed S on right hip	June 9, 1911	Aug. 15, 1911	Dec. 8, 1911	24 00	17 00
"	"	Gelding, buckskin, pony, black points, some white on face, aged, no brands visible	June 9, 1911	Aug. 15, 1911	Dec. 8, 1911	45 00	37 47

DEPARTMENT OF AGRICULTURE

SALES OF ESTRAY ANIMALS UNDER THE STRAY ANIMALS ORDINANCE, FROM JANUARY 1ST TO NOVEMBER 30TH, 1911.—Continued

JUSTICE	ADDRESS	CLASS OF ANIMAL	Date of Capture	First Gazette Notice	Date of Sale	Procs'ds of Sale	Sent to Department
Fletcher, R W	Burdett	Horse, bay, four white feet, spot in face, about 3 years old, branded F B, on right shoulder.	June 10, 1911	June 30, 1911	Nov. 25, 1911	105 00	\$93 60
"	"	Mare, white, about 1,200 pounds, no brand visible.	June 10, 1911	June 30, 1911	Nov. 25, 1911	92 00	81 31
"	"	Horse, bay, spot in face, about 12 years old, 1,200 pounds, no brand visible.	June 10, 1911	June 30, 1911	Nov. 25, 1911	84 50	73 75
"	"	Mare, bay, about 1,000 pounds, branded a cross with a horizontal bar over, on left shoulder.	June 10, 1911	June 30, 1911	Nov. 25, 1911	66 00	55 95
Hastings, H I	Hastings (onlee	Mare, bay, stripe in face, left hind foot white, crippled in front feet, about 1,200 pounds, seven years old, branded N followed by horizontal bar and by a script E, on left thigh.	June 10, 1911	June 30, 1911	Nov. 25, 1911	32 00	22 80
Heath, B M	Bruce	Gelding, gray, branded 6 with lazy B over on right flank, also T H, on left shoulder.	July 1, 1911	Sept. 30, 1911	Dec. 9, 1911	40 50	28 14
Mundv. Jas	Leduc	Mare, buckskin, about 950 pounds, about 4 years old, no brand visible.	Aug 1, 1911	Sept 15, 1911	Dec. 22, 1911	117 00	108 50
Markelberg, D	Markerville	Gelding, sorrel, 7 years old, left hind foot white, spot on right hind foot, foretop trimmed, branded P, connected on right shoulder, and P Z with bar, on right ribs, indistinct brand on right thigh.	June 14, 1911	Sept 30, 1911	Nov 30, 1911	31 00	14 35
"	"	Steer, light roan, rising 3 years old, red neck, and head, spot on forehead, short horns, lower part of right ear cut, no brand visible.	Nov 12, 1910	Jan. 14, 1911	Mar. 28, 1911	26 00	5.94
"	"	Heifer, red, about 1½ years old, star in forehead, white on each flank, left ear cropped, slit in right ear, branded O K bar over, or heart K bar over, on right ribs.	Nov 2, 1910	Feb 28, 1911	Apr 25, 1911	14 00	
Morton, C B	Erskine	Heifer, red, yearling, no brand visible.	Dec. 1, 1910	Apr. 29, 1911	July 5, 1911	13 25	2.47
"	"	Heifer, red, yearling, ears and tail off.	Nov 15, 1910	Dec. 15, 1910	Feb. 25, 1911	16 00	.06
"	"	Cow, red, 6 years old, branded 11 bar over, and bar through the hind leg, on left shoulder.	Nov 15, 1910	Dec. 15, 1910	Feb. 25, 1911	16 00	
"	"	Heifer, red, calf, red, shackle faced.	Nov 15, 1910	Dec. 31, 1910	Mar. 7, 1911	23 00	6.13
"	"	Heifer, red and white, yearling, branded R X U, on left ribs.	Nov 15, 1910	Dec. 31, 1910	Mar. 7, 1911	9 00	1.45
"	"	Cow, red and white, 6 years old, split right ear, branded K hanging inverted Y, left ribs.	Nov 15, 1910	Dec. 31, 1910	Mar. 16, 1911	18 00	
"	"	Steer, red and white, yearling, white face, no brand visible.	Dec 15, 1910	Jan. 31, 1911	Apr 15, 1911	21 00	7.31
"	"	Cow and calf, cow, red and white, spotted, mulley, 6 years old, no brand visible, calf black and white spotted, calf at foot.	Dec 15, 1910	Jan. 31, 1911	Apr 15, 1911	36 00	21.94
McIntyre, N	Vegreville	Gelding, black, about two years old, star in forehead, and stripe in forehead, no brand visible.	Jan 5, 1911	Jan. 31, 1911	Apr. 15, 1911	36 00	18 13
Parker, W	Medicine Hat	Gelding, pony, dark bay, 14 hands high, roached mane and tail, 900 pounds, no brand visible.	Apr 11, 1911	Aug 15, 1911	Nov 30, 1911	101 00	82 05
			Sept 26, 1911	Oct 15, 1911	Dec. 22, 1911	34 00	23.50

Fweed, J. G.	Cochrane	Steer calf, red and white, no brand visible	Feb.	1910	Mar. 15, 1911	Dec. 21, 1911	13.50	.97
White, W. F.	Nanton...	Steer, red, branded an imperfect circle scarcely completed with a short dash under, and a lower half circle under the dash, on left shoulder.....	Jan. 1, 1911	July 15, 1911	Dec. 22, 1911	15.00	9 08	
Wyndham, A	Okotoks	Steer, red, 5 years old, branded C F on right hip, and reverse of brand on right ribs	Aug 15, 1911	Sept. 15, 1911	Dec. 27, 1911	59 00	43.50	

ENTIRE ANIMALS.

This year there were 51 estray bulls and 29 estray stallions captured and duly advertised in the official Gazette. Of this number 14 bulls and 10 stallions were sold, the remainder being redeemed by the owners.

The balance of the proceeds of the sales of these animals is held in trust in the same manner as under The Stray Animals Ordinance.

The following is a list of the sales conducted during the year:

SALES OF ESTRAY ENTIRE ANIMALS UNDER THE ENTIRE ANIMALS ORDINANCE FROM JANUARY 1st TO NOVEMBER 15th, 1911.

JUSTICE	ADDRESS	CLASS OF ANIMAL	Date of Capture	First Gazette Notice	Date of Sale	Procs'ds of Sale	Seft to Depart-ment
Anderson, P. B.	Bardo..	Bull, red, one year old, white face and belly, right ear split, no brand visible..	Jan. 15, 1911	Jan. 30, 1911	Mar. 8, 1911	\$12.00	\$
Biddell, P. J	Cowley..	Stallion, cayuse, 3 years old, left hind foot white, barb wire cut on left front foot, about 750 pounds..	Dec. 18, 1910	Dec. 31, 1910	Jan. 28, 1911	25 00	8 80
Campbell, Fred.	Ferry Point..	Bull calf, nine months old, red, little white on belly, ears split, no brand visible..	Jan. 4, 1911	Jan. 31, 1911	Apr. 3, 1911	14 00	..
"	"	Bull, red, white on belly, notch in right ear, about 4 years old, no brand visible..	Mar. 4, 1911	Mar. 31, 1911	May 4, 1911	16 00	..
"	"	Bull calf, about 10 months old, white, red head and neck, no brand visible..	Dec. 12, 1910	Feb. 28, 1911	June 17, 1911	10 00	..
Davidson, D.	Daysland.	Stallion, bay, 2 years old, two white feet, white face, branded 2 inside of a circle, on right hip..	June 14, 1911	June 30, 1911	July 19, 1911	50 00	32 03
Davies, C. A.	Perbeck	Bull calf, yearling, spotted red and white, bull, no brand visible..	Dec. 24, 1910	Jan. 1911	Apr. 17, 1911	6 00	..
Fetherston, T. W.	Nanton..	Bull, red, yearling, no brand visible	Sept.	Nov. 15, 1910	Feb. 11, 1911	20 00	3 70
Grey, W. B.	Stettler..	Stallion, iron gray, 2 years old, black feet, white star in forehead, no brand visible	June 2, 1911	June 15, 1911	July 22, 1911	70 00	47 75
Mortimer, S.	Claresholm..	Stallion, black, 1½ years old, no brand visible, no white markings..	Aug. 1, 1910	Jan. 15, 1911	Feb. 4, 1911	46 00	25 75
Richardson, S. A.	Bens Lake..	Bull, light red, yearling, branded U followed by an arrow head pointing to the right, with upper quarter circle, or bar over in right ribs..	May 15, 1911	June 15, 1911	June 26, 1911	74 00	48 90
Sobey, R. E.	High River.	Stallion, yearling, no brand visible	Jan. 26, 1911	Jan. 31, 1911	Mar. 31, 1911	17 50	7 22
Wells, Geo. A.	Whitebrush..	Bull, red and white, one year old, no brand visible..	Apr. 1911	June 1911	July 8, 1911	16 00	..
Wynn, Robert..	Knee Hill Valley..	Bull, red, two years old, no brand visible..	May 8, 1911	May 15, 1911	July 8, 1911	18 00	3 35
White, W. E.	Nanton..	Bull, small red yearling, branded reversed F, M on left ribs..	Nov. 1, 1910	Jan. 31, 1911	Apr. 4, 1911	18 00	..
Allison, F. E.	Tea.....	Stallion, black, 2 years old, white spot in face, branded vertical split key with upper quarter circle over, on left shoulder, or it might be called a shepherd's crook with feet crossed..	June 26, 1911	July 15, 1911	Oct. 10, 1911	17 50	4 86
Botsford, O.	Langdon..	Bull, calf, about 10 months old, white, red head and neck, no brand visible..	Dec. 12, 1910	Feb. 28, 1911	June 17, 1911	10 00	..
Campbell, Fred.	Ferry Point..	Stallion, sorrel, about 3 years old, white spot on forehead and legs, white hind legs, weight about 700 pounds, no brand visible..	Apr. 1, 1911	Apr. 29, 1911	June 9, 1911	50 00	23 80
Layton, F. P....	Camrose..	Bull, 2 years old, iron gray lined with white, thick stubby horns, no brand visible..	May 1, 1911	May 31, 1911	July 26, 1911	12 00	..
Mennie, R. H.	Andrew...	Bull, Hereford, no brand visible	Oct. 1, 1910	Dec. 15, 1910	May 24, 1911	21 00	..
McGowan, C. T.	Harry Hills.	Stallion, bay, four years old, about 950 pounds, branded A, small on left shoulder, with half diamond above and below	June 8, 1911	July 15, 1911	Aug. 31, 1911	27 00	8 85
Oliffe, W. H.	Arrowwood	Bull, red and white, short horns, ring in nose, 4 or 5 years old	June 1, 1911	June 30, 1911	July 14, 1911	35 00	17 55
Walker, A. W....	Penhold..	Stallion, dark steel gray, two years old, branded inverted W slanting with lower half diamond under..	July 20, 1911	Sept. 15, 1911	Nov. 23, 1911	29 00	12 15
West, John W.	Millet...						
Serpent, Jas.	Altorado.....						

POUND DISTRICTS.

During the year great interest was taken in the organizing of pound districts throughout that part of the province in which the Ordinance is applicable. Pounds were created in a large number of districts during the past twelve months, and in addition to this a number of applications have been received requesting that the provisions of the Ordinance be put in operation in new districts.

The following is a list of the pound districts organized during the year 1911:

- No. 1—Township 4, range 12, and townships 5 and 6, range 11, all west of the 4th meridian.
- No. 2—Township 39, range 1, west of the 5th meridian.
- No. 3—Township 30, range 24, west of the 4th meridian.
- No. 4—Township 50, range 23, west of the 4th meridian.
- No. 5—Township 13, range 27, west of the 4th meridian.
- No. 6—Township 20, range 27, west of the 4th meridian.
- No. 7—Township 19, range 20, west of the 4th meridian.
- No. 8—Township 21, range 26, sections 1 to 24 on the south side of the Big Bow River, west of the 4th meridian.
- No. 9—Township 16, range 29, sections 8 and 9, west of the 4th meridian.
- No. 10—Township 30, range 25, west of the 4th meridian.
- No. 11—Township 19, range 21, west of the 4th meridian.
- No. 12—Townships 19 and 20, range 25, west of the 4th meridian.
- No. 13—That part of townships 8 and 9 west of the Belly River, in range 22, west of the 4th meridian.
- No. 14—Township 12, range 19, west of the 4th meridian.
- No. 15—Township 29, ranges 3 and 4, west of the 4th meridian.
- No. 16—Townships 31 and 32, ranges 5 and 6, west of the 4th meridian.
- No. 17—Townships 47 and 48, range 13, west of the 4th meridian.
- No. 18—Township 13, range 26, west of the 4th meridian.
- No. 19—Townships 15 and 16, ranges 1 and 2, west of the 4th meridian.
- No. 20—Township 28, range 3, west of the 4th meridian.
- No. 21—Township 35, range 24, west of the 4th meridian.
- No. 22—Township 13, range 17, west of the 4th meridian.
- No. 23—Township 28, range 1, west of the 4th meridian.
- No. 24—Townships 32 and 33, ranges 1 and 2, and township 34, ranges 2 and 3, all west of the 4th meridian.
- No. 25—Townships 3, 4, 5 and 6, range 10, and township 6, range 9, all west of the 4th meridian.
- No. 26—Township 8, range 10, west of the 4th meridian.
- No. 27—Township 11, range 19, west of the 4th meridian.
- No. 28—Township 8, range 11, west of the 4th meridian.
- No. 29—Township 3, range 11, west of the 4th meridian.
- No. 30—Township 28, range 28, west of the 4th meridian.
- No. 31—Township 32, range 24, west of the 4th meridian.
- No. 32—Township 12, ranges 17 and 18, west of the 4th meridian.
- No. 33—Township 5, and south half of township 6, range 28, west of the 4th meridian.
- No. 34—Townships 12, 13 and 14, ranges 7 and 8, west of the 4th meridian.
- No. 35—Township 28, range 10, west of the 4th meridian.
- No. 36—Township 39, range 1, west of the 5th meridian.

There were taken up under the Ordinance in the various pound districts during the year, 236 head of cattle, 163 head of horses and one pig. These were advertised in the official Gazette in the regular manner. Of this number only 29 head of horses, 41 head of cattle and one pig were sold. The remainder were claimed by their owners.

The proceeds of these sales have been deposited with the department in a trust account and may be obtained by the owner upon his producing satisfactory proof of ownership.

The table following gives a description of the animals sold under the Ordinance

SALES OF IMPOUNDED ANIMALS UNDER THE POUND DISTRICT ORDINANCE, FROM JANUARY 1ST TO NOVEMBER 30TH, 1911.

POUNDKEEPER	ADDRESSES	CLASS OF ANIMAL	Date of Capture	First Gazette Notice	Date of Sale	Procs'ds of Sale	Sent to Department
Outkes, H	Crossfield	Steer, light roan, branded indistinctly on right ribs, might be a U, double forked Y	Feb 2	Feb 15, 1911	Mar. 24, 1911	\$27 50	\$18 10
Rodgers A E	Stavelv.	Cow, spotted, red and white, left ear notched on under side, about 8 years old, no brand visible	Dec. 8, 1910	Dec. 15, 1910	Feb. 3, 1911	26 00	9 50
"	"	Steer, black, mulley, branded what looks like a lazy T, small D, lazy J, under the T, and a right quarter circle under the J, on right ribs	Jan 27, 1911	Feb. 28, 1911	Mar. 31, 1911	20 00	12 40
"	"	Cow, spotted red and white, about 8 years old, branded with a large unreadable brand and le s, branded U Q with lower half circle over, on left shoulder	Jan. 27, 1911	Feb 28, 1911	Mar. 31, 1911	17 00	9 50
"	"	Heifer, red, white face and leg, red rings around the eyes, no brand visible	July 2, 1911	July 15, 1911	Aug 9, 1911	29 00	18 83
"	"	Steer, red, branded 4 followed by a vertical split key, points up, on left hip	July 19, 1911	July 31, 1911	Aug 26, 1911	10 00	.80
Rodeback, J	Raymond	Heifer, red, coming 2 years old, branded O H on right ribs	July 19, 1911	July 31, 1911	Aug 26, 1911	18 00	8 60
"	"	Steer, white on flanks, also white on forehead, mulley, coming 2 years old, branded 114 on right ribs, lazy B on right thigh	Jan 4, 1911	Jan 14, 1911	Feb 20, 1911	16 00	7 00
"	"	Heifer, red, coming 2 years old, white under belly, right ear cropped, underbit out of left ear, branded bar with upper half circle over, on left ribs	Jan 11, 1911	Jan 31, 1911	Mar 3, 1911	13 00	3 60
"	"	Cow, white, red neck, mulley, branded K K, bar under, high up on left shoulder, and blotched brand low down on left shoulder, white faced calf at foot	Jan. 11, 1911	Jan. 31, 1911	Mar 3, 1911	19 30	10 40
"	"	Steer, red, about 3 or 4 years old, branded J P on right thigh, and J P on right ribs	Jan. 4, 1911	Jan. 14, 1911	Mar. 16, 1911	28 50	15 94
"	"	Mare, black or brown, white spot on forehead, cuppled in hind parts, branded B with bar over and under, on left thigh	Jan. 28, 1911	Mar 31, 1911	May 1, 1911	11 00	.
"	"	Filly, bay, two years old, white stripe in face, both hind and left front foot white, no brands visible	June 3, 1911	June 15, 1911	July 17, 1911	5 00	.
"	"	Mare, bay, or brown, about 900 pounds, white spot on forehead, white snip on nose, left hind foot white, collar marks, no brand visible, has calf at foot	June 21, 1911	July 15, 1911	Aug 16, 1911	60 00	49 00
"	"	Heifer, red, white belly, yearling, left ear cropped, underbit in right ear, branded lazy goblet with bar over, on left ribs	June 21, 1911	July 15, 1911	Aug 16, 1911	81 00	69.48
"	"	Cow, red, about 3 years old, white under belly, branded a figure that looks like a small circle followed by a square connected on right shoulder, calf at foot	July 20, 1911	July 31, 1911	Aug. 31, 1911	20 00	12 57
"	"	Heifer, about 3 years old, red with brookie face, branded reversed F followed by F on right ribs	July 20, 1911	July 31, 1911	Aug 31, 1911	31 00	23 20
"	"	Mare, sorrel, stripe in face, right hind foot white, crippled in right front foot, quite old, branded D B on left thigh, and reversed E on right shoulder	July 20, 1911	July 31, 1911	Aug. 31, 1911	30 00	22.32
"	"		Aug. 4, 1911	Aug. 15, 1911	Sept. 21, 1911	28 50	18 38

SALES OF IMPOUNDED ANIMALS UNDER THE POUND DISTRICT ORDINANCE, FROM JANUARY 1ST TO NOVEMBER 30TH, 1911.

POUNDKEEPER	ADDRESS	CLASS OF ANIMAL	Date of Capture	First Gazette Notice	Date of Sale	Procs'ds of Sale	Sent to Department
Rodeback, J. Thomson, Geo..	Raymond Magrath..	Pig, white, about 150 pounds, no brands Cow, red, with white face, branded bar followed by lazy V connected to the H. on left ribs Stallion, black, two years old, white spot on forehead, black, branded J on right jaw..	Aug. 10, 1911 Dec. 18, 1910	Aug. 31, 1911 Dec. 31, 1910	Sept. 30, 1911 Jan. 28, 1911	\$17.25 30.00	\$ 7.05 19.55
Baughman, O. H.	Sweet Valley.	Steer, red, no brand visible.. Gelding, bay, two white hind feet, small white stripe in forehead, about 11 or 12 years old, branded 6 on left shoulder, also 6 on right side of neck..	May 16, 1911 June 12, 1911	May 31, 1911 June 30, 1911	June 29, 1911 July 28, 1911	40.00 26.00	18.45 13.85
"	"	Filly, dark brown, two white hind feet, white stripe on forehead, 6 on 7 years old, branded J with reversed 3 over connected, with bar on right shoulder. and F followed by J connected, with bar under, on right hip.....	July 18, 1911 May 27, 1911	July 31, 1911 May 31, 1911	Aug. 28, 1911 July 19, 1911	81.00 28.00	69.85 14.40
Marks, L. G. Skelton, M. W..	Rosemead... Wheat Centre.	Stallion, about 18 months old, sorrel, branded lazy key on right jaw	May 9, 1911	May 31, 1911	June 6, 1911	40.50	25.00
"	"	Gelding, gray, about 20 years old, branded a figure that looks like a lazy 8 followed by O connected, on left thigh... left	July 22, 1911	Aug. 15, 1911	Sept. 13, 1911	30.00	19.05
"	"	Gelding, buckskin, about 12 years old, branded piston on left shoulder, scrippet N on left thigh, right fore and ankle broken	July 22, 1911	Aug. 15, 1911	Sept. 13, 1911	13.00	2.50
Martin, Wm..	Lost Lake.	Stallion, bay, two years old, white hind feet, branded lazy B on right hip....	July 9, 1911	July 31, 1911	Sept. 18, 1911	40.00	14.25
"	"	Mare, dark brown, 7 or 8 years old, branded a L lazy 7 monogram, 3 vertebrae under, on right thigh	July 9, 1911	July 31, 1911	Sept. 18, 1911	91.00	73.85
Orr, Andrew W..	Dinton.	Steer, red, small, each horn about 18 inches long, branded on belly, about an inch	Dec. 6, 1910 Jan. 20, 1911	Jan. 15, 1911 Feb. 15, 1911	Feb. 13, 1911 Mar. 15, 1911	21.00 25.00	7.60 3.17
Pawson, W. H., Jr	Coaldale.	Bull, black, red, six years old, no brand visible..	Jan. 11, 1911	Jan. 31, 1911	Mar. 15, 1911	25.00	12.07
"	"	Steer, red, white face long horns, 4 years old, branded indistinctly on right hip, might be a figure 2	Jan. 11, 1911	Feb. 15, 1911	Mar. 25, 1911	5.00	.....
"	"	Heifer, red, 8 months old, branded p 2 bar over, on right ribs	Dec. 28, 1910	Jan. 14, 1911	Mar. 1, 1911	18.00	9.47
"	"	Heifer, red, two years old, no brand visible	Dec. 28, 1910	Jan. 14, 1911	Mar. 1, 1911	9.00	69
"	"	Steer, dark red, one year old, white face, branded reversed L capital T bar, on left ribs	Dec. 28, 1910	Jan. 14, 1911	Mar. 1, 1911	15.00	6.54
"	"	Calf, roan, nearly white, bull, no brand visible..	Dec. 28, 1910	Jan. 14, 1911	Mar. 1, 1911	15.00	6.54
"	"	Cow, red, 3 years old, white jaws, branded O on light hip	Dec. 28, 1910	Jan. 14, 1911	Mar. 1, 1911	7.00	7.52
"	"	Steer, red, 1 year old, white face, warts around eyes, no brand visible..	Dec. 28, 1910	Jan. 14, 1911	Mar. 1, 1911	16.00	7.52
"	"	Heifer, red, 2 years old, indistinct brand on left ribs...	Dec. 28, 1910	Jan. 14, 1911	Mar. 1, 1911	17.50	8.98
"	"	Steer, red, 1 year old, large white spot on left ribs, short horns, no brand visible..	Dec. 28, 1910	Jan. 14, 1911	Mar. 1, 1911	8.50	21
"	"	Heifer calf, 8 months old, black and white, with white face, no brand visible..	Dec. 28, 1910	Jan. 14, 1911	Mar. 1, 1911	8.50	21

Pawson, W. H., Jr	Coaldale.	Apr. 4, 1911	Apr. 15, 1911	May 13, 1911	8.00	1.10
"	"	Apr. 4, 1911	Apr. 15, 1911	May 13, 1911	8.00	1.10
"	"	Apr. 4, 1911	Apr. 15, 1911	May 13, 1911	8.00	1.10
"	"	Apr. 8, 1911	Apr. 15, 1911	May 13, 1911	8.00	1.10
Goddard, E	Goddard	June 7, 1911	June 15, 1911	July 13, 1911	8.00	
Sheets, C. C	Altorado.	Aug. 16, 1911	Sept. 15, 1911	Oct. 10, 1911	53.00	40.00
"	"	Sept. 1911	Sept. 30, 1911	Oct. 28, 1911	117.00	*
"	"	Sept. 19, 1911	Sept. 30, 1911	Oct. 28, 1911	110.00	*
"	"	Sept. 19, 1911	Sept. 30, 1911	Oct. 28, 1911	146.00	*
"	"	Sept. 19, 1911	Sept. 30, 1911	Oct. 28, 1911	17.00	*
"	"	Sept. 19, 1911	Sept. 30, 1911	Oct. 28, 1911	112.00	*
"	"	Sept. 19, 1911	Sept. 30, 1911	Oct. 28, 1911	75.00	*
"	"	Sept. 19, 1911	Sept. 30, 1911	Oct. 28, 1911	100.00	*
"	"	Sept. 19, 1911	Sept. 30, 1911	Oct. 28, 1911	6.25	*
"	"	Sept. 19, 1911	Sept. 30, 1911	Oct. 28, 1911	52.00	*
"	"	Sept. 19, 1911	Sept. 30, 1911	Oct. 28, 1911	163.00	*
"	"	Sept. 19, 1911	Sept. 30, 1911	Oct. 28, 1911	66.00	*
"	"	Sept. 19, 1911	Sept. 30, 1911	Oct. 28, 1911	127.00	*
"	"	Sept. 19, 1911	Sept. 30, 1911	Oct. 28, 1911	121.00	*
"	"	Sept. 19, 1911	Sept. 30, 1911	Oct. 28, 1911	65.00	*
Bailey, Harry	Barney.	Sept. 19, 1911	Sept. 30, 1911	Oct. 28, 1911	35.00	*
Byers, H. W.	Taber	Sept. 15, 1911	Sept. 30, 1911	Oct. 31, 1911	45.00	24.50
Pawson, W. H., Jr	Coaldale.	Nov. 22, 1911	Nov. 30, 1911	Dec. 30, 1911	39.00	30.25
"	"	Sept. 24, 1911	Oct. 14, 1911	Dec. 13, 1911	187.50	166.90
"	"	Nov. 13, 1911	Nov. 30, 1911	Dec. 28, 1911	27.50	7.25

*The amount sent to the Department for the above fifteen animals amounted to \$1,246.12.

HERD DISTRICTS

The following districts have now been constituted under the provisions of the Ordinance:

Range 1, townships 29, 50, 51, 52, and that portion of township 53 lying south of the North Saskatchewan River.

Range 2, townships 49, 50, 51, 52, 53 and that portion of township 54 lying south of the North Saskatchewan River.

Range 3, townships 51, 52, 53 and those portions of townships 54 and 55 lying south of the North Saskatchewan River.

Range 1, townships 47 and 48.

Range 3, townships 49 and 50.

Range 4, townships 50 and 51.

Ranges 1 and 2, townships 38, 39 and 40.

Ranges 3 and 4, townships 38, 39 and 40.

Range 1, townships 47 and 48.

Range 4, township 54.

Range 2, township 47.

Range 2, township 48.

Range 4, township 49.

Ranges 1 and 2, township 41.

Range 3, township 47.

Ranges 1, 2 and 3, township 37.

Range 5, township 48.

Range 4, township 52.

Range 3, township 47.

Range 2, township 47.

Ranges 1 and 2, township 41.

Range 2, township 48.

All west of the fourth meridian.

During the past twelve months considerable interest has been shown in the establishment of herd districts, not only in that part of the province where such a law forms the only protection the settler can secure, but in many other districts outside of the area in which the Ordinance is applicable. The following is a list of the districts that have been organized during the past year:

Township 48, range 3, west of the 4th meridian.

Township 40, range 5, west of the 4th meridian.

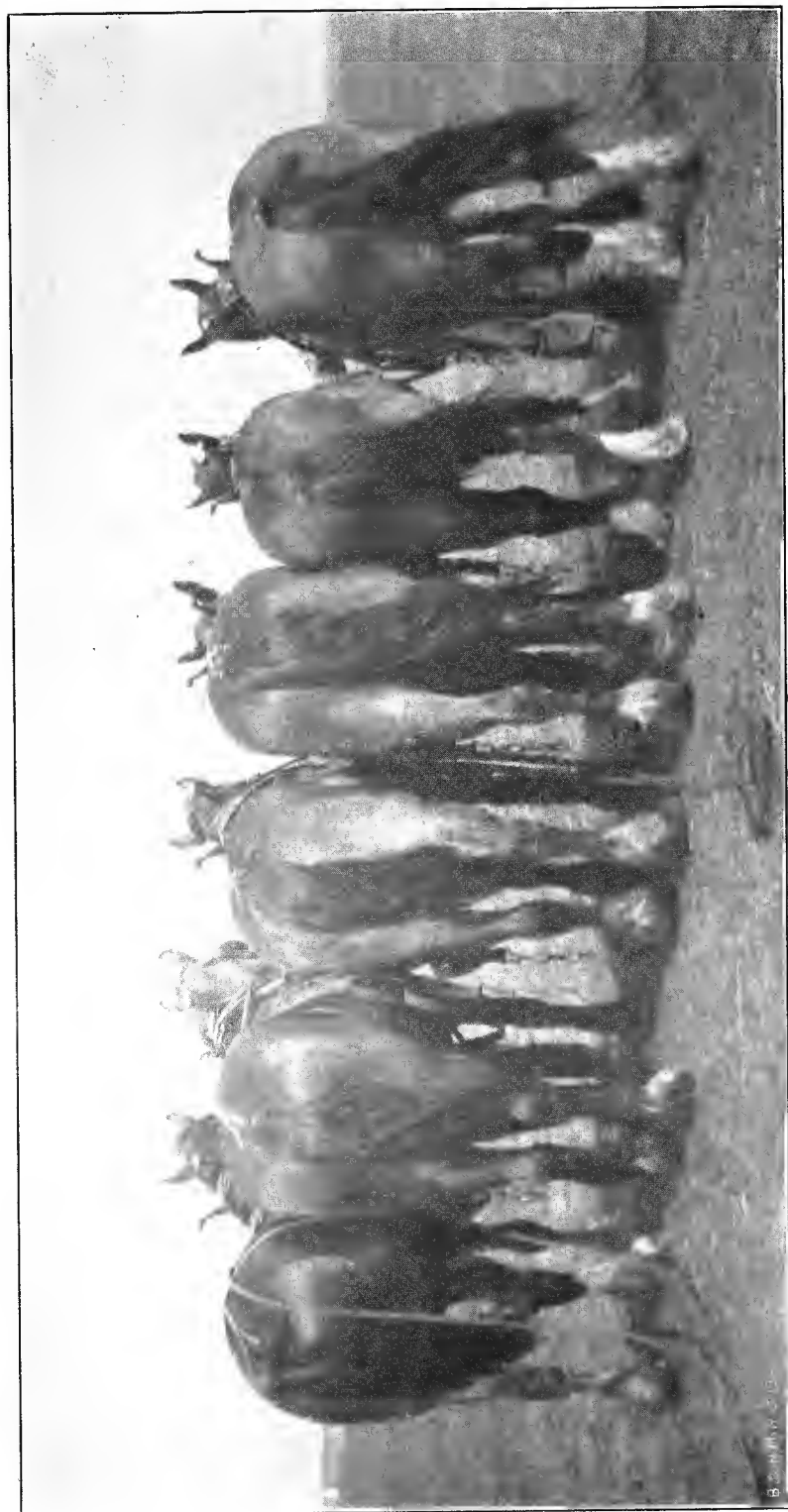
Township 52, range 4, west of the 4th meridian.

There was only one animal sold under The Herd District Ordinance this year. The following is the description of same:

John H. Findley, Poundkeeper, Cadogan, sold on July 17th, a blue roan heifer, with no brand visible. Date of impoundment June 19th, 1911. First Gazette notice, July 15th. Proceeds of sale, \$24.50. Amount sent to the department, \$14.05.

STOCK INSPECTION.

During the year a number of stock inspectors were appointed at new stations that have gradually risen to importance on old lines of railway, and quite a number at leading points on new lines. With the rapidly growing mileage of new railways each year is likely to see a large increase in the number of stock inspectors. Assistance was again given the Western Stock Growers' Association in maintaining an efficient man as stock inspector at Winnipeg. As a result of this inspector's work a large number of animals were found to have been shipped without authority. The inspector collected from the shipper the market value of all such animals. The amount so collected, together with a correct description of the animal and



A STRONG ARGUMENT ON A FARM—HORSES ON DEMONSTRATION FARM, CLARESHOLM.

the brands thereon, were forwarded to the secretary of the association who located the owners as far as he was able. A description of the unlocated balance was forwarded to the department and the animals duly advertised in the supplement to the official Gazette. A number of those advertised are nearly always claimed. The proceeds of those unclaimed is placed in the general trust account and may be claimed any time within twelve months, after which it passes into the general revenue of the province.

The Stock Inspection Ordinance was amended by the legislature making inspection of pure bred stock no longer necessary when such stock were being shipped to or from an exhibition.

The accompanying table gives the usual statistics regarding the shipments of stock in the province:

STOCK STATISTICS FOR ALBERTA. Calculated from returns received up to December 31st, 1911.

SHIPPING POINT	INSPECTOR	EXPORTS				LOCAL SHIPMENTS		TOTAL	
		EAST		WEST		CATTLE	HORSES	CATTLE	HORSES
		CATTLE	HORSES	CATTLE	HORSES				
Acme..	D. J. Witwer	4	93	949	33	5,470	26	6,423	152
Airdrie	L. Farr	289		265	10	345	65	899	75
Aldersyde	Wm. B. Way		162	8		19	23	27	185
Alix..	Horace Hickling	201		346	15	821	50	1,368	65
Bashaw	J. A. Windsor	1	19			340	71	341	90
Bassano	W. S. Playfair		120		184	43	158	43	462
Bawlf	K. O. Eggen	460	4		3	1,376	26	1,836	33
Blackfalds	Joseph Capron		2	116	10	5	103	121	115
Botha	W. A. Armstrong					44	1	44	1
Bowden	P. McDermott	11	4	213	8	842	33	1,066	45
Bow Island	H. E. Beattie			5	8		37	5	45
Brooks	Jas. Gregory	2,941	148		24	1,039	723	3,980	895
Bruce	Jas. Waldie					26	19	26	19
Calgary	P. D. Sanders	288	846	12,943	372	3,638	4,393	16,869	5,611
Canrose	W. G. Duggan	53	122	111	1	1,510	60	1,674	183
Cardston	F. Falconer	3,671	146	270	33	1,571	782	5,512	961
Carstairs	Robt. Scott	42	20	990	51	2,146	354	3,178	425
Castor	N. McCarthy	587	6	551	6	910	431	2,048	443
Cayley	L. Beaton	2,103	2	1,797	26	1,376	24	5,276	52
Champion	W. A. Carmichael					...	..	...	...
Chigwell..	Arthur Burnet					1,385	62	1,385	62
Chipman	Andrew Watson	80	39	507	4	1,203	450	1,790	493
Clareholm	C. W. James	218		148		511	58	877	58
Clive	Jno. T. Reynolds								
Cochrane	A. R. McKay	22	96	1,168	86	763	270	1,953	452
Coutts..	Wm. T. Patton	143					2	301	2
Cowley	P. J. Biddell	146	14	201	70	654	178	1,001	262
Crossfield	Wm. Urquhart		1	43		723	308	766	309

Crowfoot	Chas. Rodbourne	20			22	11	22	3
Czar	Chas. Houcher	609			732	3	1,341	3
Daysland	D. Davidson	13			2,062	181	2,075	218
Didsbury	H. B. Atkins	23		1,453	4,094	226	5,570	466
Donalds	J. R. Grahm				227		227	
Drumheller	F. R. Smith							
Edberg	W. F. Wendt				46		46	
Edmonton	J. H. Pickering	72		1	401	1,039	474	1,692
Erskine	Oliver Gibbon	708		345	2,032	41	3,085	58
Ferintosh	F. Kuhnke	24			172		196	
Fort Saskatchewan	Jno. Graff	29			1,217	69	1,246	69
Gadsby	J. E. McElhone			194	270		464	1
Gleichen	Thos. Henderson	122		1,379	3,996	1,009	5,497	2,203
Granum	Neil Nicholson			429		214	1,935	214
Grassy Lake	Wm. Salvage				1,506			
Greenshields	Chas. F. Gibson							
Halkirk	W. H. Taylor				91	10	91	10
Hardisty	Arthur Wood	500			228	61	728	88
High River	Chas. E. Fisk	19			359	633	523	971
Holden	A. E. Stewart	405		145	1,015	19	1,436	19
Innisfail	A. Aspinall	58		543	5,305	289	5,906	312
Innisfree	A. A. Loftus	363			768		1,131	...
Irricana	Wm. Dennis			20	877	4	897	4
Irvine	Carl Beny	116		20	46	185	182	340
Islay	D. H. Moore	155			113	30	34	34
Killam	J. H. Caldwell	4			93	48	93	48
Kitscoty	S. F. Campbell							
Lacombe	Jas. P. Kent	41		367	1,244	998	1,652	1,216
Lamont	T. C. Smith				922		922	
Lavoie	Fred Pass				40	3	40	3
Leduc	J. S. Johnson	13		28	1,338	225	1,379	252
Lethbridge	C. W. Lowther	2,910		75	3,571	967	6,556	1,348
Lloydminster	H. Miller	398			16	8	414	8
Magrath	Benj. Matkin	1,211		64	137	450	1,412	452
Macleod	R. G. Mathews	5		675	974	937	1,654	1,486
Mannville	Walter Shuh							

STOCK STATISTICS FOR ALBERTA. Calculated from returns received up to December 31st, 1911.—Continued.

SHIPPING POINT	INSPECTOR	EXPORTS				LOCAL SHIPMENTS		TOTAL	
		EAST		WEST		CATTLE	HORSES	CATTLE	HORSES
		CATTLE	HORSES	CATTLE	HORSES				
Medicine Hat.	J. H. G. Bray	1,839	2,336	183	104	792	474	2,814	2,914
Millet.	Alex. Minard					242	48	242	48
Minburn	E. Huffman					20		20	
Morinville.	Nick Hittinger			4		825	34	829	34
Morley.	Frank L. Wellman			91				91	
Morningside	W. C. Huston					25	10	25	10
Mundare.	Valentine Mohr	107	9			824	15	931	24
Nanton	Peter McElroy	1	10		36	313	531	314	577
Nevis.	A. E. Bedford					12		12	
New Norway.	Norman M. Smith	88				309		397	
Ohaton	A. W. Fleming	2	16			396	28	398	44
Okotoks.	Geo. C. S. Patterson	42	148	181	16	812	392	1,035	556
Olds.	Thos. McKercher	50	10	1,231	34	6,658	276	7,939	320
Penhold	I. M. Hart	6	5		6	1,074	45	1,080	56
Pincher Creek	Jas. Robertson	45	146	715	107	435	228	1,195	481
Ponoka.	A. Reid	199	7	449		2,431	187	3,079	194
Provost	Jas. Carter						81		81
Ranfurly.	Albert Labelle								
Raymond	F. J. O'Brien	276	94	126		2,793	26	3,195	120
Red Deer	F. L. Cottle		24	416	19	2,302	434	2,718	477
Round Hill.	Wm. Ross					26		26	
Ryley.	P. N. Kjosness					305		305	
Sedgewick	Jno. Burn		8			677	125	740	134
Stavely.	J. B. Robertson		2	1	2	76	26	77	30
St. Albert	J. A. Piquette								
Stettler	Jay C. Blain	1,038	8	952	15	3,865	179	5,855	202
Stony Plain	Thos. Davis					42	3	42	3
Strathcona.	A. Wainwright	59	111	15	77	193	1,560	267	1,748

Strathmore	165	133	54	4	775	265	994	402
Strome	496	24		6	473	95	969	119
Taber	2	4			5	83	7	93
Tees								
Tofield	66	3		9	424	134	490	146
Vegreville	103	87			2,259	120	2,362	207
Vermilion	22	60	14	1	1,726	115	1,762	176
Viking								
Wabamun								
Wainwright	103				530		633	
Walsh	2,191	76	371	182	782	118	3,344	376
Wetaskiwin								
	25,862	8,660	31,188	1,954	93,253	21,999	150,303	32,613
Total.								

WOLF BOUNTY.

As in previous years a bounty of ten dollars on timber wolves and one dollar on wolf pups has been paid. Bounty was claimed on two hundred and thirty grown wolves, and on thirty-seven wolf pups.

II—CROPS

WEATHER CONDITIONS AND STATISTICS.

The supervision of the voluntary meteorological service in the province started by the Territorial Department has been continued under the direction of the Dominion meteorological office at Toronto. During the year a number of new observers were appointed and the following is a complete list of all stations in operation in 1910:

METEOROLOGICAL STATIONS IN THE PROVINCE OF ALBERTA, 1911.

SHOWING THE LATITUDE, LONGITUDE, ALTITUDE AND NAME OF EACH OBSERVER.

STATION	Latitude	Longitude	Altitude	OBSERVER
Alix	52 24	113 10		W. Parlbj.
Athabasca Landng.	54 43	113 17	1650	Sam Hayes.
Banff	51 10	115 34	4542	L. B. Sanson.
Bon Accord	53 53	113 24		John Schofield.
Calgary.	51 2	114 12	3389	Miss M. Bradin.
Cardston.	49 12	113 18		M. Woolf.
Daysland	55 52	112 17		D. Davidson.
Didsbury.	51 40	114 8	3300	C. S. Peterson.
Dunvegan	55 56	118 35	1305	F. I. Bedson.
Eckville.	52 23	114 22	3000	W. W. Caskarth.
Halkirk.	52 15	112 12		Mrs. W. L. Fulton.
Edmonton	53 33	113 30	2158	Campbell Young.
Fort Vermilion.	55 27	116 3		Rev. A. S. White.
Fort Vermilion.				Robt. Jones.
Fort McMurray				Miss Gordon.
Gleichen.	50 59	112 54	2952	J. H. Jowett.
Gilt Edge.	52 59	110 43		Fred Ellis.
High River	50 35	113 53	3394	L. M. Robertson.
Hillsdown.	52 14	113 29	2806	R. E. Fiske.
Harmattan	51 45	114 23	3500	W. Levesley.
Islay.	52 24	110 32		J. R. Giles.
Knee Hills	51 31	113 22	3100	A. Wyndham.
Loveland..				Geo. Kerslake.
Lethbridge	49 42	112 51	2961	C. B. Bowman.
Lunnford	54 33	114 19		G. F. Newhall.
Lethbridge Exp. Farm	49 43	112 51		W. H. Fairfield.
Lacombe Exp. Farm	52 28	113 44	2783	R. E. Everest.
Lawrence	50 16	113 26	3350	L. D. Meachan.
Macleod Police	49 44	113 24	3128	Corp. Lindblad.
Peace River Crossing ..	56 15	117 15		H. A. George.
Medicine Hat	50 1	110 37	2161	H. Hassard.
Pembina				D. H. Telfer.
Pakan	54 0	112 31		C. A. Mitchell.
Pincher Creek	49 0	114 4	3750	C. W. Gill.
Three Hills Creek	51 30	113 11		W. E. Cutler.
Spirit River	55 40	118 47		A. M. Josse.
Wetaskiwin	52 58	113 23	2480	J. H. Walker.
Waitefield	53 29	111 38	2000	Thos. B. Waite.

OBSERVERS WHO REPORT ON RAINFALL, THUNDER AND SNOWFALL.

Station	Observer
Bardo.	J. N. Jevning.
Bismark	Henry Nagel.
Brooks.	I. Wilde.
Bruederheim.	C. A. Albrecht.
Bittern Lake	E. C. Roper.
Campsie..	Wm. Wallace.
Conjuring Creek.	J. A. Sangster.
Coutts	Sergeant Oliver.
Dorenlce	C. Nixon.
Elkwater	G. W. Smiberet.
Josephsburg.	James Robinson.
Jumping Pond	L. J. G. Ward.
Lacombe Experimental Farm.	Miss A. M. Crow.
Langdon.	C.P.R. Irrigation Co.
Loch Sloy.	Hugh MacFarlane.
Macleod.	J. Stenson.
Okotoks.	H. R. Harper.
Ponoka	John Hagemann.
Sion.	Geo. H. Cottman.
Wahamun.....	J. C. Haddock.

MONTHLY WEATHER REVIEW, 1911.

January.

EDMONTON.—A month with considerable cloudy weather and extremely low temperature and a snowfall of 12 inches. Stock exported in good condition: 66 hours of bright sunshine.

MEDICINE HAT.—Prairie, snow covered to mountains, range cattle in fair condition. Depth of snow on ground about four inches, ice in river about two feet.

February.

EDMONTON.—The first week of February was very cold, but during the remainder of the month the weather has been for the most part comparatively mild with bright sunshiny days. Stock throughout this district is in good condition. Snow disappearing fast during mild weather of the past week. Bright sunshine 163.1 hours.

MEDICINE HAT.—Snow crusted on prairie, and cattle suffering, prospects for stock are gloomy, and ranchers fearful of the outcome.

March.

EDMONTON.—A month of fine warm weather, stock report as having wintered well.

MEDICINE HAT.—Springlike weather; ranch stock very thin with some losses; some seeding done but not general; conditions for seeding good.

April.

EDMONTON.—A month of fine weather with light precipitation; conditions good for farming operations; hours of bright sunshine, 223.

MEDICINE HAT.—The land is in splendid condition and prospects good. Seeding well advanced and farmers jubilant as to outlook. Grass well forward and range stock improving in condition.

May.

EDMONTON.—A month of fine weather for the crops. Frequent showers of rain did much good and growth of vegetation has been very rapid. Two hundred and twenty-six hours of sunshine.

MEDICINE HAT.—Plenty of moisture, crop prospects never better and everybody optimistic. Splendid growth of grain and grass.

June.

EDMONTON.—During the first three weeks of the month fine weather prevailed, but the balance was very cloudy, heavy rains falling on the last three days. Crops are in fine condition; river about its average for June. Bright sunshine 211 hours.

MEDICINE HAT.—Some crops have suffered from hot dry winds which prevailed in the early part of the month, but everything has revived since the late rains. Crop prospects excellent; considerable thunder and lightning but as usual little or no damage therefrom.

July.

EDMONTON.—A month of very wet weather; crops all over the province reported as being in excellent condition. Much warmer conditions are needed; 259 hours of bright sunshine.

MEDICINE HAT.—Grain crops suffering from want of rain; haying started; some rye and winter wheat harvested.

August.

EDMONTON.—The rainy weather of July was continued throughout August and the crops at present are in a backward condition. Light frost reported, but no serious damage. The hay crop is unusually heavy. 217 hours of bright sunshine.

MEDICINE HAT.—Crops have been revived by the good rains; little if any damage by frost, roots and vegetables very fine, grain good sample. Plenty of feed in sight for the winter.

September.

EDMONTON.—A month of fine weather with occasional showers in middle of month. 204 hours of bright sunshine.

MEDICINE HAT.—Some crops injured by frost, nearly all damaged by wet weather. Conditions unfavourable for harvesting but brightening up lately and threshing now in full swing.

October.

EDMONTON.—A month of fine weather with very little precipitation; threshing general all over district with very favourable reports as to crops, stock doing well. Hours of bright sunshine, 159.

MEDICINE HAT.—Threshing delayed by wet weather, about 70 per cent. finished. Unusually heavy frosts towards the end of month; roots and vegetables good; weather beautiful now.

November.

EDMONTON.—Fine weather prevailed during the greater part of the month with light fall of snow in the first half and extremely low temperature between the 8th and 17th; 133 hours of bright sunshine.

MEDICINE HAT.—Threshing not finished yet owing to heavy snow and cold weather; snow fast disappearing, stock doing well.

December.

EDMONTON.—A month of fine weather with a very light snow-fall; 85.4 hours of bright sunshine.

MEDICINE HAT.—Threshing just about finished. Good sleighing. Stock in good condition and plenty of feed for the winter.

[illegible]

ANNUAL PRECIPITATION FROM 1898 TO 1911, INCLUSIVE.—Continued.

STATION	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	Average
Red Deer														17 75	
Seven Persons														17 53	
Sion.										17 11	17 98	20 69	19 79	24 36	19 98
Spirit River													7 34	10 94	
Sundial														12 37	
Three Hills Creek						18 53	11 44	18 02	15 25	13 77	14 29	15 74	8 49	17 13	14 74
Tilly...														3 04	
Waitefield									24 57	17 07	22 87	17 83	13 83	19 00	19 19
Wetaskiwin						20 87	18 10	13 18	16 64	17 97	17 97	13 94	17 40	36 50	19 17
Wabamun ..										20 36	19 97	7 67	0 00	12 00	

MONTHLY PRECIPITATION FOR 1911.

STATION	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Alix	1 20	47	92	1 54	2 25	5 16	4 14	3 24	1 82	71	74	15	22 34
Athabasca Landing	92	48	1 16	34	1 87	5 48	2 30	2 02	1 38	38	50	17 03	
Banff	3 12	65	54	1 15	1 35	2 84	1 38	3 76	1 14	56	1 64	20	19 17
Bardo	3 20		10	20	1 67	3 90	4 11	2 28	40	53	40	15	16 94
Bismark	3 90	39	49	1 21	5 80	5 85	4 46	4 47	2 24	67	70		30 18
Bittern Lake	75	27	31	58	2 86	3 88	5 48	4 43	4 46	31	44	33	20 10
Blairmore	2 45	18	20	25	5 88	1 95	1 38	3 18	5 05				20 52
Brooks	35	74	28	1 38	2 27	6 24	95	2 64	70	52	1 27	26	17 60
Bruderheim	66	55	41	53	1 81	4 37	3 98	3 98	1 16	65	58		18 68
Caldwell	3 57	2 69	65	1 38	4 99	6 21	2 00	4 37	6 42	1 06	2 82	88	37 04
Calgary	44	56	1 04	1 06	5 03	2 63	2 17	4 36	1 50	51	61	08	19 99
Campsie	1 07	28	43	46	1 47	4 56	4 88	1 77	1 48	35	50	18	17 43
Conjuring Creek		23	25	35			3 19						4 02
Cardston	2 80	1 40	30	90	4 42	6 32	2 82		4 81	1 37	1 50	1 20	27 84
Daysland												65	65
Delia						3 49	2 57	4 10	1 10	82	2 40	30	14 78
Didsbury	30	40	1 55	1 00	3 20	4 50	2 63	6 47	1 33	92	65	40	23 35
Dorelee	2 00	30	45		91	4 26	6 80	5 20	1 35	40	4 50	37	26 54
Eckville	60	02	52	1 00	1 02	3 05	3 63						9 84
Edmonton	1 18	31	39	45	1 95	3 80	5 83	4 49	98	51	52	26	20 67
Endiang					2 46	5 30	3 51	2 39	93	45	74		15 78
Fort Vermilion	91	35	1 45	1 38	73		1 81	1 06	1 78	15	75	30	11 57
Fort Vermilion				1 85	72	3 67	4 05	2 85				15	13 29
Five Lake					1 89	5 75	4 11	2 18	1 76	33	58	1 95	18 55
Gilt Edge	2 10	30	15	55		3 88	2 88	2 69	85				13 40
Gleichen		40	90	80	3 40	1 48	1 92	3 31	77	65			13 63
Grassy Lake	20	10	20	60	2 50	1 75	50	2 50	1 50	20	1 05	50	11 60
Halkirk	50	43	54	19	2 25	6 94	4 16	2 91	1 59	61	46	11	20 69
Harmattan	46	65	1 28	1 35		3 46	2 93	5 47	1 67	95	60	28	19 13
High River	90	1 00	1 50	65	3 52	4 63	1 81	4 85	2 14	78	95	30	17 03
Hillsdown	85	50	87	1 94	2 15	5 08	3 88	3 86	1 89	97	1 14	30	23 43
Jumping Pond	75	21	66	1 10	2 72	3 05	2 64						10 13
Jacombe			1 29	85	1 43	4 07	2 23						9 87

MONTHLY PRECIPITATION FOR 1911.—Continued.

STATION	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Lacombe Exp. Farm..	.55	.48	1.01	1.15	1.51	5.63	4.39	2.63	2.50	.62	.78	.19	21.44
Lawrence....	.80	.70	.52	.65	3.00	3.57	1.68	2.23	1.64	.39	..	.40	15.58
Lethbridge....	.82	.51	.42	.89	2.32	4.62	2.33	4.04	3.98	.57	..	.41	22.16
Lethbridge Exp. Farm.	.70	.52	.32	.82	1.90	4.71	2.27	3.63	4.16	.41	1.25	.77	21.19
Lincham....	.12	.19	.17	.05	2.18	2.50	3.00	4.60	4.48	..	.12	.05	13.46
Loch Sloy....	.57	1.51	.80	1.10	3.31	6.34	1.90	5.13	2.25	.61	.68	.50	24.70
Loveland....	.12	.82	.12	.54	1.65	4.73	2.45	2.96	.85	.63	.30	.10	14.33
Lunnford....	1.67	.27	.27	.16	1.61	5.60	4.35	2.66	1.68	.46	.45	.45	19.63
Lyndon....	1.07	1.41	.55	1.78	5.90	1.18	2.40	6.29	.57	.61	1.41	.56	23.73
Macleod (Police)...	1.20	1.15	1.15	.45	2.76	4.61	2.77	2.79	3.14	.33	.62	.70	20.52
Macleod....	1.60	.82	.10	1.65	3.74	4.06	.54	3.61	5.49	.56	1.12	1.05	24.34
Manyberries	..	.05	.15	.60	..	..	..	..	..	..	..	..	.80
Maycroft....	2.55	1.35	.45	1.25	3.45	1.42	1.61	4.08	3.11	.45	1.92	.72	22.36
Medicine Hat	..	..	.32	1.49	1.84	3.60	1.65	2.20	1.75	.45	2.20	.54	16.04
Vinda....	.17	..	..	..	..	..	..	..	..	..	..	..	.17
Kotoks....	.17	.62	.32	.40	1.35	3.35	2.31	3.56	1.93	.10	1.05	.25	15.41
Pakan....	1.22	.52	.37	.46	.91	4.12	2.11	2.44	1.35	.32	.54	.20	14.56
Peace River Crossing.	1.65	.40	.50	.15	1.29	2.67	4.08	1.76	3.02	..	.75	.90	17.17
Pembina....	.47	.55	.60	.20	1.02	6.98	2.74	3.91	1.65	..	.40	..	18.52
Pekisko....	..	..	..	1.00	4.34	2.68	2.61	5.51	5.04	.97	1.32	.55	24.02
Pincher Creek.	..	..	..	..	..	4.05	2.70	6.66	..	3.91	1.93	.01	19.26
Ponoka....	.85	.60	.44	.83	1.34	3.90	4.43	2.87	2.93	.44	.92	.55	20.10
Playle Creek	..	..	..	..	3.27	1.77	3.15	3.79	..	..	1.10	.75	13.83
Red Deer....	..	..	..	..	2.10	5.07	4.89	3.30	1.61	.78	..	..	17.75
Seven Persons.	85	..	..	1.87	1.64	5.08	.07	1.45	4.65	.52	1.25	.15	17.53
Ston....	2.00	.37	1.45	.86	2.19	7.60	3.24	2.58	1.95	.24	1.30	.58	24.36
Spirit River....	.25	.12	.96	.20	.50	4.10	..	..	4.81	..	..	..	10.94
Sundial....	..	..	..	..	1.81	2.91	2.03	2.71	2.11	..	.80	..	12.37
Tully....	3.04	..	..	..	..	..	..	..	..	..	..	..	3.04
Three Hills Creek.	.70	..	.77	1.38	2.67	3.79	3.32	4.18	..	..	..	..	17.13
Waitefield.	1.30	.29	.52	.66	2.39	4.44	3.03	3.10	1.60	.59	.74	.34	19.00
Wetaskwin	.88	.26	.51	1.03	3.35	11.27	11.85	4.70	1.50	.25	.50	.40	36.50

MAXIMUM AND MINIMUM TEMPERATURES FOR METEOROLOGICAL STATIONS IN ALBERTA FOR 1911.

STATIONS	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Alix.	42.0 { Maximum. Minimum.	45.0 -44.0	64.0 -8.0	71.0 -19.0	80.0 27.0	78.0 37.0	83.0 38.0	77.0 34.0	72.0 22.0	71.0 -11.0	62.0 -24.0	65.0 -41.0
Athabasca Landing.	37.0 { Maximum. Minimum.	48.0 -55.0	51.0 -12.0	75.0 -12.0	80.0 24.0	78.0 29.0	83.0 34.0	78.0 29.0	76.0 9.0	77.0 0.0	53.0 -32.0	47.0 -38.0
Banff.	35.7 { Maximum. Minimum.	36.2 -29.8	51.1 5.0	63.0 -13.7	74.4 24.3	76.6 29.3	86.2 30.5	76.2 31.2	72.4 18.6	64.5 6.8	45.8 -37.1	39.7 -28.8
Blairmore.	39.8 { Maximum. Minimum.	42.8 -24.4	57.7 -2.3	66.3 0.6	75.2 16.3	81.2 30.9	87.2 27.7	78.3 28.7	78.0 20.1	. . .. . .	. . .. . .	. . .. . .
Calgary.	46.0 { Maximum. Minimum.	44.0 -22.0	64.0 10.0	74.0 -13.0	83.0 26.0	82.0 36.0	88.0 33.0	78.0 33.0	80.0 18.0	74.0 14.0	51.0 -21.0	50.0 -30.0
Cardston.	42.0 { Maximum. Minimum.	45.0 -32.0	60.0 15.0	70.0 -9.0	83.0 22.0	85.0 38.0	89.0 34.0	86.0 30.0	87.0 19.0	84.0 5.0	. . .. . .	. . .. . .
Delia. . . . .	. . . { Maximum. Minimum. . . . .	. . . . . .	. . . . . .	. . . . . .	. . . . . .	82.9 32.5	81.4 31.5	80.0 32.5	72.5 22.5	74.1 10.5	45.9 -24.5	40.0 -31.6
Didsbury.	46.0 { Maximum. Minimum.	56.0 -32.0	68.0 2.0	76.0 -4.0	82.0 26.0	84.0 36.0	86.0 36.0	78.0 34.0	74.0 20.0	76.0 -10.0	54.0 -26.0	54.0 -30.0
Eckville.	45.0 { Maximum. Minimum.	37.0 -44.0	56.0 0.0	72.0 -25.0	79.0 20.2	80.0 30.2	83.0 30.2	. . .. . .	. . .. . .	. . .. . .	. . .. . .	. . .. . .
Edmonton.	42.0 { Maximum. Minimum.	52.0 -42.0	63.0 -1.0	77.0 -15.0	83.0 24.0	82.0 34.0	87.0 40.0	82.0 33.0	77.0 20.0	79.0 11.0	51.0 -24.0	50.0 -33.0
Endiang. . . . .	. . . { Maximum. Minimum. . . . .	. . . . . .	. . . . . .	. . . . . .	86.0 23.2	80.5 31.7	85.0 36.2	79.0 31.7	75.0 20.2	77.0 -3.0	50.0 -23.0	39.0 -37.0

MAXIMUM AND MINIMUM TEMPERATURES FOR METEOROLOGICAL STATIONS IN ALBERTA FOR 1911.—Continued.

STATIONS		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Fort Vermilion	{ Maximum { Minimum	7 0 -76.5	41.0 -57.0	48.5 -35.0	69.0 -26.0	80.3 22.0		89.0 32.2	73.2	71.8	69.0		
Fort Vermilion.	{ Maximum { Minimum	.....	.....	.....	64.0 -24.3	82.2 19.0	87.0 29.0	90.3 32.2	77.5 31.5		76.9 35.0		
Gilt Edge.	{ Maximum { Minimum	28.7 -52.4	36.7 -40.6	56.6 -10.0		.2	88.2 30.2	80.0 31.0	82.5 26.2	75.0 13.6			
Gleichen. . .	{ Maximum { Minimum	41.0 -41.0	35.0 -28.0	67.0 3.0	76.0 -4.0	84.0 27.0	85.0 35.0	92.5 36.5	77.0 30.0	71.0 21.0	76.0 10.0		
Halkirk.	{ Maximum { Minimum	34.0 -44.0	32.0 -32.0	55.0 0.0	71.0 -7.0	85.0 23.0	84.0 36.0	85.0 36.0	79.0 32.0	73.0 21.0	70.0 9.0	50.0 -17.0	42.0 -28.0
Harmattan.	{ Maximum { Minimum	47.0 -48.0	52.0 -35.0	64.0 -3.0	72.0 -17.0		78.0 30.0	84.0 30.0	77.0 28.0	74.0 17.0	77.0 4.0	52.0 -30.0	50.0 -38.0
High River	{ Maximum { Minimum	45.0 -43.0	47.0 -27.0	64.0 8.0	73.0 -6.0	82.0 23.5	83.0 36.0	89.0 33.0	79.0 33.5	74.0 20.0	78.0 7.5	50.0 -23.0	49.0 -34.0
Hillsdown.	{ Maximum { Minimum	42.6 -47.0	42.0 -36.0	64.0 1.0	75.0 -10.0	81.0 26.0	80.0 37.6	84.0 36.0	78.0 34.0	72.0 21.0	74.0 10.0	48.0 -22.0	44.0 -35.0
Lacombe Experimental Farm	{ Maximum { Minimum	40.0 -47.5	43.6 -39.2	61.7 -3.6	76.0 11.9	83.4 22.4	80.0 34.7	85.0 33.9	80.0 29.5	76.0 21.5	80.5 8.7	46.0 -21.6	45.8 -37.6
Lawrence.	{ Maximum { Minimum	38.0 -44.0	42.0 -23.0	68.0 -13.0	75.0 0.0	85.0 20.0	90.0 32.0	95.0 33.0	83.0 30.0	75.0 16.0	78.0 2.0	49.0 -37.0	
Lethbridge . . .	{ Maximum { Minimum	46.0 -39.3	47.2 -20.2	68.9 9.8	74.5 2.3	90.8 26.5	89.1 39.6	91.8 41.0	85.6 31.2	81.8 25.0	79.4 9.7	50.8 -19.1	57.6 -32.4

Lethbridge Experimental Farm.	{ Maximum Minimum	44.5 -38.8	49.0 -20.5	70.5 10.5	75.3 0.4	87.6 25.2	86.5 35.4	92.5 37.9	85.9 29.4	82.9 25.4	83.0 -13.3	50.4 -23.5	58.1 -34.3
Loveland	{ Maximum Minimum	43.0 -45.0	.. -34.0	..	.. -9.5	93.0 24.0	84.0 34.0	88.0 32.0	83.0 28.0	76.0 20.0	77.0 4.0	52.0 -19.0	38.0 -36.0
Lunnford	{ Maximum Minimum	43.0 -61.2	57.0 -54.5	56.5 -16.5	75.0 -21.0	77.0 19.5	78.2 28.5	85.4 31.0	79.0 28.2	75.6 17.4	78.0 5.0	52.6 -31.4	50.2 -41.0
Macleod Police	{ Maximum Minimum	49.0 -45.0	62.0 -21.0	69.0 9.0	78.0 4.0	88.0 28.0	86.0 42.0	90.0 40.0	82.0 35.0	81.0 26.5	78.0 14.0	50.0 -23.5	55.0 -35.0
Medicine Hat	{ Maximum Minimum	..	..	84.0 8.2	80.0 3.2	99.0 30.0	93.0 43.0	95.0 42.0	92.0 31.0	84.0 28.0	80.0 14.0	55.0 -26.0	45.0 -32.0
Pakan.	{ Maximum Minimum	40.5 -62.0	42.7 -53.0	54.0 -15.0	75.0 -16.0	80.0 17.0	79.3 31.5	83.5 35.0	77.6 29.0	77.0 17.5	75.0 6.0	49.9 -29.0	39.0 -46.0
Peace River Crossing	{ Maximum Minimum	42.0 -70.0	49.0 -54.0	51.0 -25.0	74.0 -13.0	82.0 32.0	85.0 31.0	92.0 33.0	77.0 31.0	79.0 26.0	79.0 11.0	53.0 -33.0	..
Pembina	{ Maximum Minimum	42.0 -60.0	49.5 -53.0	55.0 -20.0	75.0 -16.0	76.0 19.0	79.0 24.0	83.0 32.5	80.0 32.0	95.0 16.0	..	60.0 -26.0	..
Pincher Creek	{ Maximum Minimum	..	..	..	..	..	82.0 35.0	85.0 32.0	77.0 33.0	..	..	..	..
Playle Creek	{ Maximum Minimum	..	..	..	..	..	..	..	..	..	..	..	50.3 -34.9
Red Deer	{ Maximum Minimum	..	..	..	..	81.0 25.0	79.0 14.0	84.0 34.0	79.0 32.0	74.0 22.0	78.0 7.0	..	..
Sion	{ Maximum Minimum	46.4 -50.0	58.0 -43.0	66.0 2.0	74.0 -15.0	80.0 23.0	86.0 35.0	90.0 38.0	84.0 34.0	82.0 20.0	86.0 10.0	56.0 -26.0	46.0 -33.0

MAXIMUM AND MINIMUM TEMPERATURES FOR METEOROLOGICAL STATIONS IN ALBERTA FOR 1911.—Continued.

STATIONS		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Spirit River	Maximum.	45.0	48.0	52.0	69.0	77.0	85.0			87.0			
	{ Minimum.	-58.0	-45.0	-12.0	-18.0	23.0	27.0			19.0			
Sundial	Maximum					90.0	88.0	92.0	83.0	77.0		59.5	56.0
	{ Minimum.					26.0	39.5	40.0	29.0	22.0		-24.0	-36.0
Three Hill Creek..	Maximum.	41.0	35.0	66.0	75.0	84.0	82.0	84.0	77.0				
	{ Minimum.	-46.0	-34.0	0.0	-15.0	25.5	35.5	25.0	34.5				
Waitfield	Maximum.	33.0	40.0	50.8	74.8	87.0	82.0	84.0	84.0	75.8	78.0	51.5	41.8
	{ Minimum.	-57.0	-40.0	-12.3	-13.0	24.9	34.5	36.0	28.5	16.0	-10.0	-27.0	-42.0
Wetaskiwin	Maximum.	40.0	39.0	50.8	74.0	84.0	81.0	85.0	78.0	77.0	75.0	48.0	45.0
	{ Minimum	-50.0	-47.2	-12.3	-11.0	26.0	40.0	36.0	19.0	18.5	6.0	-29.0	-32.0

HOURS OF SUNSHINE RECORDED, 1911.

STATIONS	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
DUNVEGAN.	47 9	131 2	121 1	184 5	246 4	226 7	207 4	192 4	174 2	142 2	70 5	28 1	1772 6
EDMONTON	66 3	164 1	190 8	222 9	226 2	211 7	259 4	217 9	204 3	159 1	113 3	85 4	2127 4
FORT VERMILION	*	*	*	165 5	233 8	217 2	262 4	214 2	165 7	140 6	88 2	*	.
LACOMBE....	68 6	152 1	168 2	227 6	230 8	247 4	267 7	235 0	185 7	177 3	75 3	85 4	2122 1
LETHBRIDGE	101 9	135 9	160 4	219 8	199 2	296 9	329 6	261 4	213 2	187 1	95 6	79 7	2280 7
MEDICINE HAT	*	154 6	169 0	248 8	237 3	289 0	312 6	267 4	176 1	170 3	93 8	62 2	.

*No records furnished.

DEPARTMENT OF AGRICULTURE

HAIL INSURANCE, 1911

Number of contracts.	5,390
Number of claims for indemnity	1,530

Acreage Insured.

Wheat	199,195
Oats	205,562 $\frac{1}{2}$
Barley	28,941 $\frac{3}{8}$
Flax	13,203 $\frac{1}{2}$
Rye	3,718
Total	<u>450,620$\frac{1}{2}$</u>

Acreage fully insured	380,336 $\frac{1}{2}$
Acreage partially insured	70,284
Total	<u>450,620$\frac{1}{2}$</u>

Number of Acres Insured.

At rate of 25 cents per acre	416,747 5-6
Number of acres fully insured	380,336 $\frac{1}{2}$
Acreage partially insured reduced to fully insured	36,411 7-12
Total	<u>416,747 5-6</u>

Total amount of premiums collected	\$104,271 54
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Estimated acreage under crop	1,700,000
Approximate proportion of total acreage under crop insured, 25%	
Number of acres damaged.	129,706 $\frac{1}{2}$
Percentage of insured acres damaged	.31%

Expenses.

Indemnity paid	\$193,309 44
Stamps, post cards, etc	340 00
Examiners	7,229 28
Clerical services	952 65
Total expenses.	<u>\$201,831 37</u>

CROP STATISTICS.

The early part of the season was dry giving excellent opportunity for seeding a large area. Growth, however, was slow at first on account of drouthy conditions. These improved later and not in years were the prospects so bright for a heavy crop as during the middle of the crop growing season, and had the latter part of the season been as favourable for harvesting and threshing as it had been previously for growing, all records would have been broken. Instead, however, of receiving our usual dry weather for the final ripening, harvesting, and threshing operations, the country experienced continued wet weather. This prolonged the growing period and prevented the grain ripening. In many cases this carried the grain into the period when frost might be expected, and in fact some fields were seriously injured. The land being so wet prevented the operation of binders and thus further delayed harvesting.

As a result of these untoward conditions winter set in with a large amount of grain unthreshed and many large areas standing in the stook in the field. Threshing was pushed along as rapidly as possible but a spell of very cold weather early in November again seriously set back all operations. Many of the threshing gangs quit and left for the east. Finer weather later started a few machines, but there was snow and ice on the grain and most of it graded "tough." Winter closed down on a somewhat disappointed lot of farmers.

On account of the delayed threshing it was a very difficult task to obtain anything like accurate returns until quite late the following year. These have been completed and will be found in their proper place. To say they are astonishing as well as most gratifying is putting it mildly. When to this is added the fact that the grain which stood in the stook all winter, and that was looked upon by many as ruined, threshed out in the spring none the worse except for a slight discolouration on the outside of the sheaves (and in fact when sold graded one grade higher than grain from the same field in the fall) our credulity is severely tested. Yet, such were the facts. A light snowfall during the winter and a dry spring helped to redeem the untoward conditions of the fall. Threshing machines were in operation in many districts until into July.

Owing to the prolonged period of ripening and to the fact that much of the grain was cut on the green side, the straw would have made excellent feed and should have been fed to thousands of steers instead of being burned.

Spring Wheat.—In those sections where, owing to the drouth of the previous year seeded land had been ploughed up, the area sown to spring wheat was very large. This together with the natural increase in new breaking gave a total area of 757,906 acres as against 450,493 acres the previous year. The average yield, despite the adverse harvest conditions, was 20.75 bushels per acre, the highest in five years, and shows what a crop would have been harvested had the season been favourable.

Winter Wheat.—On account of the late moisture of the previous year winter wheat went into winter strongly rooted and in splendid condition. It wintered well and stood the prolonged dry spring very well. A few fields went back, but wherever land had been properly prepared it held its own until the rains came. The average yield for the province is the highest since the big crop of 1908, being 23.74 bushels per acre as against 29.47 bushels of that year and 23.95 bushels in 1903, the next highest yield. The total acreage

of 182,671 shows there was not much falling off from the estimated acreage of 200,000 seeded in the fall of 1910.

Oats.—Owing to very favourable conditions for wheat seeding in the spring of 1910, the area sown to oats fell from 693,901 to 492,589 acres. This loss was practically made up this year when 669,827 acres were sown, for the 1909 crop had an unduly large area. The yield also was the largest in eleven years being an average crop of 41.21 bushels per acre and only exceeded by the crop of 1899 when it was 42.16. The total oat crop was 27,604,903 bushels.

The following tables give the acreage and yield of the various grains by constituencies for the province, with the exception of the northern districts:

CROP STATISTICS.

SPRING WHEAT.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
1	Cardston..	1907	116,277	5,718	20.33	20.81
		1908	234,811	9,371	24.73	
		1909	182,570	8,404	21.72	
		1910	194,513	11,044	17.61	
		1911	424,385	21,570	19.67	
2	Macleod.	1907	90,278	4,191	21.51	18.27
		1908	196,248	9,127	20.50	
		1909	344,877	14,500	23.78	
		1910	56,778	10,874	5.22	
		1911	375,440	18,483	20.32	
3	Lethbridge	1907	274,036	10,920	25.09	18.60
		1908	357,432	17,271	20.69	
		1909	686,885	35,270	19.75	
		1910	200,368	29,603	6.77	
		1911	2,767,831	133,686	20.70	
4	Pincher Creek	1907	25,404	1,775	14.31	17.45
		1908	10,916	486	22.46	
		1909	28,092	1,287	21.82	
		1910	4,644	559	8.31	
		1911	50,198	2,467	20.35	
5	Claresholm.	1907	680,721	23,996	28.36	18.68
		1908	1,081,293	57,209	18.90	
		1909	1,497,621	87,780	17.06	
		1910	423,460	58,134	7.28	
		1911	2,721,764	124,761	21.82	
6	Medicine Hat.	1907	76,379	6,723	11.36	13.41
		1908	81,370	10,581	7.68	
		1909	317,951	13,945	22.80	
		1910	84,927	12,098	7.02	
		1911	708,502	38,874	18.23	
7	Nanton	1907	154,349	7,916	19.49	17.54
		1908	273,127	14,518	18.81	
		1909	407,411	21,267	19.15	
		1910	109,392	22,444	4.87	
		1911	1,038,836	41,341	25.39	
8	High River. . . .	1907	20,222	1,590	12.71	17.44
		1908	85,256	4,252	20.05	
		1909	139,885	6,559	21.33	
		1910	60,221	10,013	6.01	
		1911	502,921	18,536	27.13	
9	Rocky Mountain.	1907	
		1908	.....	.....	.....
		1909	.....	.....	.....
		1910	.....	.....	.....
		1911	.....	.....	.....
10	Okotoks.	1907	14,385	844	17.04	20.30
		1908	32,954	1,363	24.17	
		1909	81,356	3,990	20.37	
		1910	60,278	4,961	12.15	
		1911	250,303	9,005	27.79	

SPRING WHEAT.—*Continued.*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
11	Cochrane.	1907	840	74	11.35	13.96
		1908	2,287	141	16.21	
		1909	8,889	404	21.50	
		1910	3,570	574	6.22	
		1911	13,145	902	14.56	
12	Gleichen.	1907	18,525	1,005	18.23	18.87
		1908	37,085	1,447	25.62	
		1909	159,389	6,670	23.89	
		1910	207,082	21,804	9.50	
		1911	906,770	52,855	17.15	
13	Didsbury	1907	6,744	455	14.82	18.30
		1908	21,878	890	24.58	
		1909	72,778	2,966	24.53	
		1910	88,403	8,598	10.28	
		1911	258,287	14,903	17.33	
14	Olds	1907	5,349	427	12.52	18.31
		1908	12,635	665	19.00	
		1909	51,780	1,926	26.88	
		1910	46,544	4,114	11.31	
		1911	116,118	5,307	21.88	
15	Stettler.	1907	76,941	4,358	17.65	18.82
		1908	194,522	9,386	20.72	
		1909	313,710	16,513	18.99	
		1910	595,639	41,998	14.18	
		1911	836,811	37,060	22.58	
16	Sedgewick	1907	68,952	3,922	17.58	17.41
		1908	281,455	16,650	16.90	
		1909	522,373	36,374	14.36	
		1910	1,492,032	79,504	18.77	
		1911	1,810,155	92,960	19.47	
17	Innisfail	1907	3,409	259	13.16	19.56
		1908	14,728	714	20.62	
		1909	21,508	940	22.87	
		1910	28,105	1,625	17.30	
		1911	26,508	1,111	23.86	
18	Red Deer	1907	5,403	323	16.72	19.99
		1908	12,472	598	20.85	
		1909	16,299	727	22.41	
		1910	44,112	2,359	18.70	
		1911	72,837	3,419	21.30	
19	Lacombe	1907	12,142	796	15.25	19.59
		1908	21,186	933	22.70	
		1909	32,930	1,611	20.44	
		1910	111,584	6,831	16.34	
		1911	183,480	7,888	23.26	
20	Ponoka	1907	19,068	1,033	18.45	21.25
		1908	38,825	1,911	20.31	
		1909	43,337	2,106	20.57	
		1910	78,064	3,279	23.81	
		1911	90,153	3,893	23.15	

SPRING WHEAT.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
21	Wetaskiwin	1907	24,441	1,409	17.34	20.93
		1908	30,438	1,590	19.14	
		1909	28,973	1,295	22.38	
		1910	51,691	2,767	18.68	
		1911	100,886	3,721	27.11	
22	Leduc	1907	24,527	1,776	13.81	20.43
		1908	42,028	2,232	18.82	
		1909	21,256	881	24.17	
		1910	33,986	1,475	23.04	
		1911	42,793	1,917	22.32	
23	Camrose	1907	97,734	6,188	15.79	18.18
		1908	174,935	9,451	18.50	
		1909	139,720	8,144	17.15	
		1910	209,410	14,014	14.94	
		1911	365,768	14,899	24.55	
24	Alexandra	1907	23,145	1,599	14.47	16.60
		1908	108,590	6,081	17.85	
		1909	245,989	12,146	20.52	
		1910	405,575	30,427	13.35	
		1911	591,678	36,264	16.82	
25	Vermilion	1907	25,683	1,555	16.51	16.97
		1908	61,319	4,003	15.31	
		1909	248,260	11,278	22.01	
		1910	373,908	28,075	13.32	
		1911	442,335	24,995	17.70	
26	Vegreville	1907	84,662	6,157	13.75	16.67
		1908	155,416	9,503	16.35	
		1909	199,327	10,033	19.87	
		1910	166,403	15,002	12.56	
		1911	388,928	18,661	20.84	
27	Strathcona	1907	50,828	3,262	15.58	23.66
		1908	64,089	3,247	19.73	
		1909	55,557	2,573	21.59	
		1910	78,281	3,749	20.88	
		1911	115,720	4,528	25.55	
28	Stony Plain	1907	52,699	3,625	14.53	18.25
		1908	63,079	3,190	19.77	
		1909	52,909	2,945	17.96	
		1910	78,325	4,371	17.92	
		1911	115,841	5,487	21.11	
29	Lac Ste. Anne	1907	851	36	23.63	24.15
		1908	2,349	178	13.19	
		1909	321	9	35.66	
		1910	1,221	46	26.54	
		1911	1,326	61	21.74	
30	Pembina	1907	2,673	168	15.91	18.34
		1908	5,310	270	19.66	
		1909	1,882	114	16.50	
		1910	3,861	203	19.30	
		1911	4,331	213	20.33	

SPRING WHEAT.—*Continued.*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
31	St. Albert	1907	4,145	325	12.75	20.26
		1908	31,649	1,612	19.63	
		1909	13,741	717	19.14	
		1910	12,478	446	27.98	
		1911	14,966	686	21.81	
32	Sturgeon	1907	28,084	1,964	14.29	19.19
		1908	58,247	3,219	18.09	
		1909	27,150	1,392	19.50	
		1910	69,393	3,183	21.80	
		1911	46,775	2,096	22.31	
33	Victoria	1907	85,794	5,955	14.40	18.90
		1908	146,942	7,820	18.79	
		1909	146,786	7,484	19.90	
		1910	230,093	12,825	17.94	
		1911	275,436	11,729	23.48	
34	Pakan	1907	10,585	580	18.25	19.38
		1908	14,035	749	18.73	
		1909	30,041	1,385	21.69	
		1910	39,341	1,824	21.56	
		1911	45,834	2,750	16.67	
35	Athabasca	1907	20,173	932	21.64	18.23
		1908	964	31	31.09	
		1909	2,477	105	23.58	
		1910	2,878	194	14.84	
		1911	.....	.....	.....
36	Peace River	1907	23.90
		1908	22,704	674	33.68	
		1909	11,425	732	15.60	
		1910	29,396	1,476	19.92	
		1911	23,177	878	26.40	

WINTER WHEAT.

No	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
1	Cardston... ..	1907	387,011	12,782	30.27	25.43
		1908	380,625	14,153	26.89	
		1909	733,626	28,227	25.99	
		1910	598,671	32,189	18.59	
		1911	1,155,096	46,318	24.94	
2	Macleod.....	1907	33,744	1,342	25.14	25.69
		1908	48,858	1,483	32.94	
		1909	105,557	3,911	26.98	
		1910	18,337	5,580	12.25	
		1911	291,498	9,367	31.12	
3	Lethbridge. .	1907	134,241	5,235	25.64	20.66
		1908	126,912	4,112	30.86	
		1909	212,852	8,767	24.27	
		1910	40,709	4,580	8.89	
		1911	199,664	14,639	13.64	

WINTER WHEAT.—*Continued.*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
4	Pincher Creek	1907	172,167	7,583	22.70	22.77
		1908	218,656	8,175	26.74	
		1909	193,878	8,182	23.69	
		1910	300,288	15,942	18.84	
		1911	494,925	22,594	21.91	
5	Claresholm	1907	297,500	11,955	24.88	22.92
		1908	471,399	16,801	28.05	
		1909	278,989	9,836	28.36	
		1910	67,114	7,054	9.52	
		1911	548,418	23,055	23.80	
6	Medicine Hat	1907	17,575	1,038	16.93	20.56
		1908	8,858	335	26.44	
		1909	33,662	1,382	24.35	
		1910	26,531	1,829	14.50	
		1911	247	12	20.58	
7	Nanton	1907	215,367	10,129	21.26	21.90
		1908	279,617	9,697	28.83	
		1909	153,744	8,039	19.12	
		1910	52,896	4,819	10.98	
		1911	561,238	19,146	29.31	
8	High River	1907	316,492	25,998	12.17	22.93
		1908	670,678	21,745	30.84	
		1909	321,389	9,413	34.13	
		1910	110,641	12,840	8.62	
		1911	387,184	13,392	28.91	
9	Rocky Mountain.	1907	21.40
		1908	214	10	21.40	
		1909	..	..	..
		1910	..	..	..
		1911	..	..	..
10	Okotoks	1907	67,472	3,515	19.19	20.89
		1908	76,751	2,921	26.27	
		1909	47,417	2,713	17.47	
		1910	48,465	3,336	14.53	
		1911	914,542	15,848	27.01	
11	Cochrane	1907	23,709	1,461	16.22	17.52
		1908	44,830	1,691	26.51	
		1909	21,292	1,440	14.78	
		1910	94,251	6,913	13.63	
		1911	36,935	2,244	16.46	
12	Gleichen	1907	33,602	2,085	16.11	21.03
		1908	127,689	3,921	32.55	
		1909	43,821	1,605	27.30	
		1910	94,029	8,682	10.83	
		1911	89,347	4,859	18.38	
13	Didsbury	1907	74,387	4,241	17.54	20.85
		1908	272,121	8,776	31.00	
		1909	42,937	2,096	20.47	
		1910	215,593	13,746	15.68	
		1911	73,794	3,773	19.56	

WINTER WHEAT.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
14	Olds.	1907	15,448	1,058	14.60	15.27
		1908	27,824	1,357	20.50	
		1909	33,225	1,739	19.10	
		1910	33,730	2,112	15.97	
		1911	6,392	1,032	6.19	
15	Stettler.	1907	6,953	214	32.49	21.79
		1908	17,236	749	23.01	
		1909	2,601	247	10.53	
		1910	1,861	145	12.83	
		1911	25,392	1,311	26.99	
16	Sedgewick	1907	57	2	28.50	18.36
		1908	998	75	13.30	
		1909	1,324	77	17.19	
		1910	39,094	2,578	15.16	
		1911	5,854	300	17.68	
17	Innisfail.	1907	8,652	832	10.39	18.84
		1908	38,906	1,419	27.41	
		1909	7,436	404	15.92	
		1910	39,713	1,897	20.93	
		1911	19,257	984	19.57	
18	Red Deer.	1907	25,965	1,133	22.91	22.47
		1908	34,363	1,121	30.65	
		1909	15,350	963	15.94	
		1910	49,117	2,878	17.07	
		1911	17,786	690	25.78	
19	Lacombe.	1907	11,374	500	22.74	19.92
		1908	28,624	1,136	25.19	
		1909	20,231	1,270	15.92	
		1910	91,034	3,905	23.31	
		1911	31,570	2,535	12.45	
20	Ponoka	1907	5,088	209	24.34	21.52
		1908	5,627	252	22.32	
		1909	9,794	550	17.88	
		1910	11,625	635	18.31	
		1911	18,175	733	24.79	
21	Wetaskiwin	1907	3,968	169	23.42	21.53
		1908	1,906	99	19.25	
		1909	9,314	418	22.27	
		1910	34,031	1,631	20.87	
		1911	59,813	2,470	24.22	
22	Leduc.	1907	3,656	176	20.77	22.27
		1908	8,492	310	27.39	
		1909	3,063	193	15.87	
		1910	27,074	1,131	23.89	
		1911	26,856	1,144	23.47	
23	Camrose	1907	4,196	227	18.48	18.68
		1908	3,180	146	21.78	
		1909	5,233	328	15.95	
		1910	17,598	1,078	16.32	
		1911	11,603	556	20.87	

WINTER WHEAT.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
24	Alexandra	1907	281	19	14.78	20.72
		1908	92	5	18.40	
		1909	32	1	32.00	
		1910	21,266	1,331	15.98	
		1911	15,913	708	22.47	
25	Vermilion	1907	270	18	15.00	15.30
		1908	781	41	19.04	
		1909	31	3	10.33	
		1910	5,256	288	18.25	
		1911	504	37	13.89	
26	Vegreville	1907	3,525	228	15.46	16.66
		1908	2,271	97	23.41	
		1909	1,612	210	7.67	
		1910	19,177	1,271	15.09	
		1911	1,823	84	21.70	
27	Strathcona...	1907	6,823	278	24.54	26.78
		1908	8,155	271	30.09	
		1909	4,595	159	28.90	
		1910	15,157	671	22.59	
		1911	23,848	858	27.79	
28	Stony Plain...	1907	4,985	283	17.61	19.08
		1908	7,940	401	19.80	
		1909	10,198	710	14.35	
		1910	45,640	1,918	23.71	
		1911	84,914	4,257	19.95	
29	Lac Ste. Anne	1907	23.76
		1908	760	36	21.11	
		1909	172	9	19.11	
		1910	...	...	...
		1911	808	16	31.07	
30	Pembina	1907	25.15
		1908	...	...	...
		1909	...	...	...
		1910	1,164	46	25.30	
		1911	3,850	154	25.00	
31	St. Albert	1907	19.07
		1908	826	51	16.19	
		1909	3,453	150	23.00	
		1910	5,359	182	29.45	
		1911	17,629	659	26.75	
32	Sturgeon	1907	1,681	72	23.34	24.92
		1908	4,631	148	31.29	
		1909	2,847	146	19.50	
		1910	12,070	502	24.04	
		1911	26,175	990	26.45	
33	Victoria	1907	841	50	16.82	22.95
		1908	955	34	28.08	
		1909	1,565	83	18.85	
		1910	13,475	595	22.65	
		1911	40,218	1,418	28.38	

WINTER WHEAT.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
34	Pakan.	1907	363	12	30.25	13.14
		1908				
		1909				
		1910	2,742	130	21.09	
35	Athabasca . . .	1911	2,529	176	14.37	20.21
		1907	305	35	8.71	
		1908				
		1909				
36	Peace River..	1910	856	33	25.94	22.19
		1911	32	2	26.00	
		1907				
		1908				
		1909				
		1910				
		1911	2,818	127	22.19	

OATS.

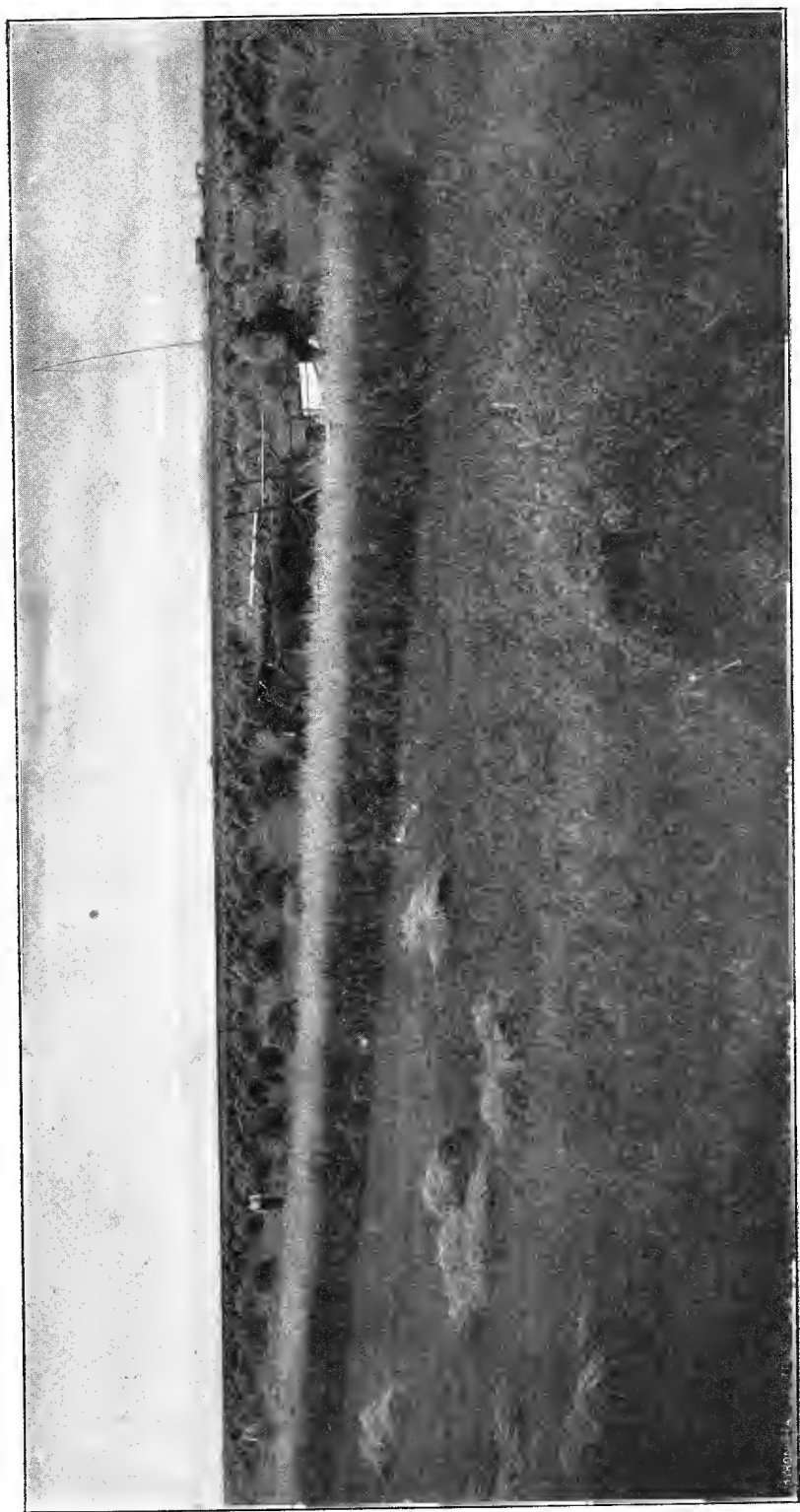
No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
1	Cardston	1907	333,606	9,280	35.94	36.69
		1908	364,944	10,034	36.37	
		1909	708,804	17,111	41.42	
		1910	38,167	2,291	16.66	
		1911	507,836	9,753	53.07	
2	Macleod.	1907	37,387	1,218	30.69	35.19
		1908	60,292	1,903	31.68	
		1909	209,087	5,360	39.01	
		1910	2,223	70	31.76	
		1911	111,063	2,594	42.85	
3	Lethbridge	1907	215,119	6,223	34.56	32.06
		1908	323,873	10,182	31.80	
		1909	536,527	17,808	30.12	
		1910	56,526	2,644	21.37	
		1911	1,010,669	23,804	42.46	
4	Pincher Creek	1907	193,398	6,002	32.22	34.74
		1908	254,533	7,746	32.85	
		1909	212,532	5,222	40.69	
		1910	27,292	1,785	15.29	
		1911	197,796	5,249	37.68	
5	Claresholm	1907	251,552	8,055	31.22	31.25
		1908	404,143	11,985	33.72	
		1909	783,121	21,499	36.42	
		1910	14,330	1,424	10.06	
		1911	768,370	17,126	44.87	
6	Medicine Hat	1907	87,573	4,250	20.60	24.89
		1908	60,662	4,099	14.79	
		1909	378,815	9,650	39.24	
		1910	25,300	1,958	12.92	
		1911	495,422	13,416	36.93	

OATS.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
7	Nanton	1907	305,860	8,014	38.16	34.81
		1908	463,009	14,140	32.74	
		1909	908,742	28,091	32.34	
		1910	108,647	5,906	18.23	
		1911	1,148,908	21,832	52.62	
8	High River	1907	529,452	17,089	30.98	35.67
		1908	1,739,964	39,322	44.24	
		1909	2,663,238	67,942	39.15	
		1910	175,576	13,517	12.99	
		1911	2,342,098	45,926	50.99	
9	Rocky Mountain.	1907	600	35	17.14	19.73
		1908	1,274	60	21.23	
		1909	.	.	.	
		1910	.	.	.	
		1911	.	.	.	
10	Okotoks	1907	296,639	7,785	38.10	39.53
		1908	652,825	15,519	42.06	
		1909	1,148,105	25,762	44.56	
		1910	79,742	5,230	15.25	
		1911	914,542	15,848	57.70	
11	Cochrane	1907	123,876	4,367	28.36	30.81
		1908	115,721	2,998	28.59	
		1909	430,001	9,816	44.87	
		1910	77,213	4,501	17.15	
		1911	294,110	8,385	35.07	
12	Gleichen	1907	322,008	9,648	33.37	38.68
		1908	842,358	19,119	44.05	
		1909	1,977,643	41,536	47.61	
		1910	415,800	24,298	17.11	
		1911	2,185,033	42,615	51.27	
13	Didsbury	1907	559,889	19,202	29.15	32.03
		1908	1,214,959	29,547	41.11	
		1909	1,974,309	50,199	39.33	
		1910	747,948	35,779	20.90	
		1911	1,122,678	37,909	29.66	
14	Olds.	1907	326,430	12,020	27.15	30.58
		1908	473,040	15,318	30.88	
		1909	861,769	23,814	36.18	
		1910	293,535	14,484	20.27	
		1911	873,467	22,711	38.46	
15	Stettler	1907	331,861	9,217	36.00	33.23
		1908	638,303	15,318	36.79	
		1909	729,909	22,972	32.10	
		1910	425,819	22,632	18.81	
		1911	956,802	22,529	42.47	
16	Sedgewick	1907	156,170	4,413	35.38	32.25
		1908	536,623	15,922	33.70	
		1909	749,583	28,206	26.57	
		1910	595,764	27,151	21.94	
		1911	1,453,396	33,257	43.70	

OATS.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
17	Innisfail	1907	205,971	8,020	25 68	32 81
		1908	365,311	10,824	33 75	
		1909	576,301	16,229	35 50	
		1910	469,135	16,805	27 92	
		1911	693,784	16,824	41 24	
18	Red Deer	1907	172,855	5,923	29 18	32 03
		1908	350,666	9,644	36 36	
		1909	392,701	12,397	31 67	
		1910	322,763	11,421	28 26	
		1911	385,448	11,103	34 72	
19	Lacombe	1907	352,365	12,870	27 37	32 81
		1908	452,390	12,641	35 78	
		1909	638,216	20,407	31 27	
		1910	872,674	27,566	31 66	
		1911	853,940	22,891	37 97	
20	Ponoka	1907	227,966	9,089	25 08	33 58
		1908	459,679	12,069	36 28	
		1909	542,273	13,026	41 62	
		1910	461,756	16,155	28 52	
		1911	714,138	19,347	36 40	
21	Wetaskiwin	1907	546,844	19,322	28 30	32 71
		1908	579,347	14,441	40 11	
		1909	876,408	26,969	32 45	
		1910	699,722	24,106	29 02	
		1911	826,391	24,531	33 69	
22	Leduc	1907	520,012	15,451	33 65	31 03
		1908	560,383	18,026	31 08	
		1909	491,777	18,596	26 45	
		1910	598,881	19,875	30 13	
		1911	653,851	19,318	33 84	
23	Camrose	1907	626,114	21,359	29 31	32 81
		1908	1,065,212	28,208	37 76	
		1909	1,345,214	43,871	30 82	
		1910	905,425	44,549	20 07	
		1911	2,242,006	48,586	46 10	
24	Alexandra	1907	73,418	2,610	28 12	31 58
		1908	288,687	8,756	32 97	
		1909	587,230	15,326	38 31	
		1910	317,712	14,006	22 68	
		1911	552,000	15,411	35 82	
25	Vermilion	1907	123,800	4,000	30 95	30 70
		1908	256,070	8,321	30 77	
		1909	693,011	19,175	36 14	
		1910	396,993	18,480	21 48	
		1911	455,330	13,326	34 16	
26	Vegreville	1907	503,417	17,539	28 70	28 84
		1908	1,779,862	27,248	28 62	
		1909	1,133,872	36,118	31 36	
		1910	563,020	32,589	17 28	
		1911	1,367,033	35,735	38 25	



HARVEST SCENE, DEMONSTRATION FARM, CLARESHOLM.

OATS.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
27	Strathcona	1907	453,963	13,903	32.65	36.61
		1908	515,140	13,055	39.45	
		1909	680,058	20,009	33.98	
		1910	590,539	17,581	33.59	
		1911	913,599	21,043	43.41	
28	Stony Plain . . .	1907	242,675	8,162	29.73	29.89
		1908	304,748	9,414	32.25	
		1909	441,274	13,672	32.20	
		1910	352,576	11,788	29.92	
		1911	405,696	15,992	25.37	
29	Lac Ste. Anne . .	1907	18,277	292	62.59	37.39
		1908	23,311	860	27.10	
		1909	9,644	357	27.29	
		1910	21,611	561	38.32	
		1911	31,866	1,006	31.68	
30	Pembina	1907	22,770	876	25.99	28.31
		1908	46,823	1,889	24.78	
		1909	80,496	2,862	28.11	
		1910	148,951	4,758	31.31	
		1911	103,470	3,296	31.39	
31	St. Albert . . .	1907	269,075	11,037	24.37	34.41
		1908	502,355	14,073	35.69	
		1909	602,960	17,412	34.62	
		1910	647,945	16,073	40.31	
		1911	597,145	16,103	37.08	
32	Sturgeon . . .	1907	405,269	11,670	34.72	36.68
		1908	564,711	14,937	37.80	
		1909	606,450	17,519	34.66	
		1910	884,598	25,114	35.22	
		1911	1,070,572	26,102	41.01	
33	Victoria	1907	357,720	13,350	26.79	33.58
		1908	421,057	12,727	33.08	
		1909	737,804	21,315	34.61	
		1910	639,811	19,619	32.61	
		1911	1,034,170	25,340	40.81	
34	Pakan	1907	72,132	2,610	27.63	27.35
		1908	54,466	2,048	26.59	
		1909	85,201	2,836	30.00	
		1910	174,089	6,647	26.19	
		1911	247,254	9,379	26.36	
35	Athabasca	1907	30,119	1,058	28.46	33.20
		1908	1,777	60	29.61	
		1909	28,438	649	43.81	
		1910	30,795	1,033	29.81	
		1911	24,085	702	34.31	
36	Peace River	1907	6,516	413	15.77	37.26
		1908	3,998	72	55.52	
		1909	4,157	167	24.89	
		1910	5,552	190	29.22	
		1911	51,061	838	60.93	

BARLEY.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
1	Cardston.	1907	14,276	669	21 33	25.69
		1908	26,925	984	27 36	
		1909	18,610	631	29 49	
		1910	1,594	149	10 70	
		1911	17,134	434	39 48	
2	Macleod.	1907	1,311	43	30 48	29.69
		1908	2,722	80	34 02	
		1909	4,674	208	22 46	
		1910	214	14	15 29	
		1911	2,033	44	46 20	
3	Lethbridge. .	1907	9,738	415	23 46	26.11
		1908	40,917	1,704	24 01	
		1909	16,308	674	25 20	
		1910	1,082	48	22 54	
		1911	9,971	282	35 36	
4	Pincher Creek .	1907	4,003	175	22 85	25.35
		1908	4,707	195	24 13	
		1909	17,257	402	42 92	
		1910	106	13	8 15	
		1911	2,442	83	28 74	
5	Claresholm. . .	1907	20,202	1,080	18 70	21.92
		1908	20,382	915	22 27	
		1909	26,710	1,086	24 58	
		1910	74	5	14 80	
		1911	9,014	308	29 27	
6	Medicine Hat . . .	1907	9,174	448	20 47	22.75
		1908	3,800	459	8 27	
		1909	37,767	1,115	33 85	
		1910	1,584	147	10 71	
		1911	30,142	745	40 45	
7	Nanton.	1907	14,788	687	21 52	22.80
		1908	25,354	1,191	21 28	
		1909	11,713	491	23 85	
		1910	40	4	10 00	
		1911	7,809	208	37 36	
8	High River . . .	1907	45,036	1,349	33 38	25.62
		1908	87,323	3,738	23 36	
		1909	92,268	3,350	27 51	
		1910	2,424	544	4 46	
		1911	74,219	1,883	39 42	
9	Rocky Mountain..	1907	114	6	19	18.75
		1908	36	2	18	
		1909	..	..	..
		1910	..	..	..
		1911	..	..	..
10	Okotoks.	1907	53,416	1,927	27 71	26.70
		1908	100,836	3,284	30 70	
		1909	121,253	3,997	30 36	
		1910	5,245	576	9 11	
		1911	77,173	2,106	36 63	

BARLEY.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
11	Cochrane	1907	19,151	982	19 50	18.03
		1908	26,163	1,158	22.59	
		1909	75,590	2,361	32.01	
		1910	5,135	656	7.83	
		1911	18,232	2,199	8.25	
12	Gleichen	1907	23,917	1,186	20.16	23.64
		1908	69,641	2,572	27.07	
		1909	129,349	4,759	27.14	
		1910	29,387	3,776	7 78	
		1911	243,822	6,758	36.08	
13	Didsbury	1907	73,593	3,653	20.14	22.19
		1908	194,312	7,210	26.95	
		1909	270,852	10,070	26.89	
		1910	90,396	5,963	15.16	
		1911	95,487	4,371	21.84	
14	Olds. . . .	1907	34,248	1,929	17.75	22.07
		1908	52,353	2,593	20 19	
		1909	114,659	3,879	29.55	
		1910	43,814	2,488	17 61	
		1911	97,683	3,468	25.25	
15	Stettler	1907	37,243	1,751	21.26	23.52
		1908	65,054	2,459	26.45	
		1909	61,635	2,515	24.50	
		1910	33,026	2,369	13 98	
		1911	41,754	1,328	31.44	
16	Sedgewick	1907	10,736	537	20.00	20.53
		1908	28,358	1,645	17.23	
		1909	40,810	1,980	20.61	
		1910	41,622	2,536	16.41	
		1911	88,023	2,960	29.40	
17	Innisfail	1907	41,566	1,981	20.98	25.34
		1908	74,126	2,974	24.92	
		1909	92,235	3,672	25.11	
		1910	86,434	3,756	23.01	
		1911	108,114	3,307	32.69	
18	Red Deer	1907	20,673	867	23.84	24.77
		1908	50,453	2,057	24.52	
		1909	78,894	2,992	23.37	
		1910	65,427	2,944	22.22	
		1911	78,778	2,632	29.93	
19	Lacombe	1907	32,951	1,562	21.09	24.73
		1908	73,233	2,948	24 84	
		1909	81,736	3,901	20 95	
		1910	141,980	5,712	24 86	
		1911	143,863	4,503	31 94	
20	Ponoka	1907	37,871	2,099	18.04	25.69
		1908	70,069	2,753	25.45	
		1909	83,400	2,536	32.92	
		1910	100,462	4,438	22.64	
		1911	164,786	5,597	29 44	

BARLEY.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
21	Wetaskiwin	1907	62,001	3,176	19 52	24 37
		1908	52,064	2,110	24 67	
		1909	65,949	3,382	19 50	
		1910	88,329	3,958	22 32	
		1911	87,296	3,312	26 36	
22	Leduc	1907	57,719	3,120	18 50	23 25
		1908	66,440	3,466	19 16	
		1909	81,947	3,658	23 40	
		1910	102,406	4,052	25 27	
		1911	118,571	3,961	29 93	
23	Camrose	1907	101,207	4,617	21 92	23 50
		1908	109,604	4,183	26 20	
		1909	123,725	5,458	22 66	
		1910	80,311	5,112	15 71	
		1911	181,504	5,853	31 01	
24	Alexandra	1907	6,470	380	17 02	21 81
		1908	33,606	1,538	21 85	
		1909	43,714	1,793	24 38	
		1910	22,878	1,298	17 63	
		1911	46,493	1,613	28 20	
25	Vermilion	1907	9,820	411	23 89	22 02
		1908	22,370	1,111	20 13	
		1909	70,678	2,760	25 00	
		1910	44,365	2,653	16 72	
		1911	60,808	2,493	24 37	
26	Vegreville	1907	69,249	3,303	20 83	21 90
		1908	92,954	3,993	23 27	
		1909	151,299	6 251	24 20	
		1910	82,250	5,897	13 94	
		1911	169,530	6,212	27 29	
27	Strathcona	1907	85,978	4,531	18 97	27 86
		1908	96,952	3,684	26 31	
		1909	162,259	5,912	27 61	
		1910	164,212	5,611	29 26	
		1911	217,516	6,555	37 18	
28	Stony Plain	1907	34,328	2,578	13 31	24 20
		1908	85,671	2,820	30 37	
		1909	117,817	4,405	26 21	
		1910	96,610	4,222	22 88	
		1911	180,473	6,384	28 27	
29	Lac Ste. Anne	1907	820	62	13 32	21 41
		1908	7,083	401	17 66	
		1909	1,496	136	11 00	
		1910	6,293	187	33 65	
		1911	5,004	191	31 43	
30	Pembina	1907	2,613	130	20 10	22 70
		1908	10,946	455	24 05	
		1909	18,494	886	20 87	
		1910	26,926	1,083	24 86	
		1911	16,133	683	23 62	

BARLEY.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
31	St. Albert	1907	28,355	1,552	18.27	27.28
		1908	82,588	2,303	35.86	
		1909	124,499	5,167	24.09	
		1910	87,550	2,916	30.02	
		1911	89,421	3,172	28.19	
32	Sturgeon	1907	56,474	3,035	18.60	25.96
		1908	117,540	4,212	27.90	
		1909	147,560	5,342	27.62	
		1910	186,538	6,680	27.93	
		1911	196,896	7,090	27.27	
33	Victoria	1907	73,759	3,933	18.65	21.76
		1908	110,894	6,348	17.46	
		1909	204,984	10,512	19.52	
		1910	194,514	8,565	22.71	
		1911	286,543	9,397	30.49	
34	Pakan.	1907	14,317	652	21.95	22.19
		1908	16,316	678	24.06	
		1909	25,124	1,115	22.53	
		1910	43,444	2,059	21.09	
		1911	61,382	2,876	21.34	
35	Athabasca	1907	10,227	282	36.44	28.56
		1908	460	15	30.66	
		1909	4,511	178	25.33	
		1910	2,625	106	24.76	
		1911	2,717	106	25.63	
36	Peace River	1907	26.32
		1908	5,569	130	42.83	
		1909	5,546	227	24.43	
		1910	10,232	364	28.11	
		1911	6,818	188	36.26	

FLAX.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
1	Cardston	1907	12.62
		1908	3,358	246	15.68	
		1909	1,780	147	12.11	
		1910	.....	.....	.....
		1911	8,740	867	10.08	
2	Macleod.	1907	15.34
		1908	..	..	..
		1909	165	33	5.00	
		1910	..	.....	.....
		1911	2,080	81	25.68	
3	Lethbridge	1907	4,823	1,051	4.78	6.59
		1908	10,064	1,475	6.82	
		1909	17,166	1,637	10.48	
		1910	22	34	65	
		1911	29,992	2,937	10.21	

FLAX.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
4	Pincher Creek ..	1907	120	20	6.00	8.01
		1908	...	...	...
		1909	281	28	10.03	
		1910	...	...	...
		1911	...	...	...
5	Claresholm	1907	29,369	3,125	9.39	9.94
		1908	3,714	436	8.51	
		1909	1,467	121	12.13	
		1910	...	...	...
		1911	24,074	2,462	9.76	
6	Medicine Hat.	1907	489	120	4.08	6.93
		1908	3,127	532	5.87	
		1909	1,823	174	10.47	
		1910	393	113	3.48	
		1911	20,634	1,916	10.76	
7	Nanton	1907	7,422	821	9.04	9.56
		1908	6,761	858	7.88	
		1909	2,660	454	5.85	
		1910	...	...	...
		1911	712	46	15.49	
8	High River.	1907	1,702	257	6.62	8.39
		1908	9,039	1,237	7.30	
		1909	911	87	10.47	
		1910	...	...	...
		1911	533	58	9.19	
9	Rocky Mountain..	1907	
		1908	...	...	...
		1909	...	...	...
		1910	...	...	...
		1911	...	...	...
10	Okotoks.	1907	187	37	5.05	11.47
		1908	1,269	104	12.00	
		1909	8,089	420	19.25	
		1910	769	95	8.09	
		1911	260	20	13.00	
11	Cochrane...	1907	10	2	5.00	9.09
		1908	378	41	9.21	
		1909	4,958	206	24.06	
		1910	873	211	4.14	
		1911	837	273	3.06	
12	Gleichen.	1907	109	21	5.19	8.45
		1908	6,946	555	12.51	
		1909	51,822	4,498	11.52	
		1910	12,754	4,174	3.06	
		1911	20,676	2,068	9.99	
13	Didsbury	1907	143	15	9.53	7.71
		1908	2,314	342	6.76	
		1909	4,305	306	14.06	
		1910	3,217	1,258	2.57	
		1911	628	111	5.66	

FLAX.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
14	Olds	1907	41	4	10 25	9.53
		1908	385	45	8.55	
		1909	1,151	102	11.28	
		1910	1,703	244	6 98	
		1911	572	54	10 59	
15	Stettler	1907	2,254	402	5 60	6.79
		1908	8,261	1,019	8 10	
		1909	10,452	1,282	8 15	
		1910	10,409	2,405	4 33	
		1911	12,827	1,643	7 81	
16	Sedgewick	1907	1,461	303	4.82	5.86
		1908	7,761	1,163	6.67	
		1909	11,069	1,648	6.71	
		1910	10,369	2,761	3.76	
		1911	12,596	1,706	7 38	
17	Innisfail	1907	8.09
		1908	13	3	4 33	
		1909	75	7	10.71	
		1910	120	13	9.23	
		1911	.. .	.. .	.. .
18	Red Deer	1907	15	1	15.00	15.46
		1908	246	11	22.36	
		1909	165	13	12 69	
		1910	397	176	2.26	
		1911	1,375	55	25.00	
19	Lacombe.	1907	12.60
		1908	175	10	17 50	
		1909	246	16	15 38	
		1910	334	37	9 03	
		1911	2,221	261	8 50	
20	Ponoka	1907	53	7	7 56	10.25
		1908	121	14	8 64	
		1909	314	29	10 83	
		1910	.. .	.. .	.. .
		1911	84	61	14 00	
21	Wetaskiwin	1907	12.90
		1908	12	1	12 00	
		1909	229	13	17.21	
		1910	143	22	6.50	
		1911	39	13	3.00	
22	Leduc	1907	16	1	16.00	18.77
		1908	.. .	.. .	.. .
		1909	367	15	24.46	
		1910	111	7	15 86	
		1911	.. .	.. .	.. .
23	Camrose	1907	1,605	189	8 49	8.39
		1908	1,698	149	11.39	
		1909	3,027	317	9 54	
		1910	2,107	445	4 51	
		1911	2,637	328	8.04	

FLAX.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
24	Alexandra	1907	516	67	7 70	8.43
		1908	1,914	171	11 19	
		1909	7,241	750	9 65	
		1910	8,513	1,444	5 89	
		1911	9,503	1,228	7 74	
25	Vermilion	1907	82	16	5 12	6.78
		1908	301	47	6 40	
		1909	1,294	139	9 30	
		1910	2,002	686	2 92	
		1911	1,558	156	10 18	
26	Vegreville	1907	142	29	4 89	9.89
		1908	1,091	88	12 39	
		1909	210	12	17 50	
		1910	580	121	4 79	
		1911				
27	Strathcona	1907	32	2	16 00	14.10
		1908				
		1909	232	19	12 21	
		1910				
		1911				
28	Stony Plain	1907				19.50
		1908	50	4	12 50	
		1909	32	1	32 00	
		1910	14	1	14 00	
		1911				
29	Lac Ste. Anne	1907				
		1908				
		1909				
		1910				
		1911				
30	Pembina	1907				
		1908				
		1909				
		1910				
		1911				
31	St. Albert.	1907				8.33
		1908	25	3	8 33	
		1909				
		1910				
		1911				
32	Sturgeon	1907				12.00
		1908				
		1909				
		1910	144	12	12 00	
		1911				
33	Victoria	1907				7.43
		1908	10	1	10 00	
		1909	77	5	15 40	
		1910	81	12	6 75	
		1911	1,300	260	5 00	

FLAX.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
34	Pakan.	1907	76	4	..	19.00
		1908			19.00	
		1909			...	
		1910			...	
		1911			...	
35	Athabasca	1907
		1908			...	
		1909			..	
		1910			..	
		1911			...	

RYE.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
1	Cardston	1907	2,052	102	20.11	20.11
		1908			...	
		1909			...	
		1910			...	
		1911			...	
2	Macleod..	1907
		1908			..	
		1909			..	
		1910			..	
		1911			..	
3	Lethbridge	1907	345 77 .. 1,157	28 14 .. 34	12 32	17.31
		1908			5.60	
		1909			...	
		1910			...	
		1911			34.02	
4	Pincher Creek	1907
		1908			..	
		1909			..	
		1910			..	
		1911			..	
5	Claresholm	1907	28	3	9 33	9.33
		1908			..	
		1909			..	
		1910			..	
		1911			..	
6	Medicine Hat	1907	13.2
		1908			..	
		1909			..	
		1910			..	
		1911	132	10	13 2	
7	Nanton	1907
		1908			..	
		1909			..	
		1910			..	
		1911			...	

Rye.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
8	High River...	1907	.	.	.	.....
		1908	.	.	.	.....
		1909	.	.	.	.....
		1910	.	.	.	.....
		1911	.	.	.	.....
9	Rocky Mountain..	1907	.	.	.	.....
		1908	.	.	.	.....
		1909	.	.	.	.....
		1910	.	.	.	.....
		1911	.	.	.	.....
10	Okotoks.....	1907	.	.	.	.....
		1908	669	33	20 27	18.38
		1909	924	56	16 50	18.38
		1910	.	.	.	.....
		1911	.	.	.	.....
11	Cochrane	1907	.	.	.	.....
		1908	100	5	20.00	17.30
		1909	1,369	47	27 01	17.30
		1910	142	29	4 90	17.30
		1911	.	.	.	.....
12	Gleichen	1907	.	.	.	.....
		1908	.	.	.	.....
		1909	.	.	.	.....
		1910	.	.	.	.....
		1911	.	.	.	.....
13	Didsbury	1907	430	19	22 63	18.18
		1908	881	48	19 19	18.18
		1909	1,692	69	24 51	18.18
		1910	2,042	156	13 09	18.18
		1911	9,661	839	11 51	18.18
14	Olds	1907	1,292	100	12.92	19 24
		1908	92	6	15 33	19 24
		1909	411	23	17.87	19 24
		1910	677	23	29 43	19 24
		1911	124	6	20 67	19 24
15	Stettler	1907	98	4	24 50	22 01
		1908	.	.	.	.....
		1909	179	13	13 76	22 01
		1910	113	7	16 14	22 01
		1911	202	6	33 67	22 01
16	Sedgewick	1907	.	.	.	.....
		1908	23	1	23 00	18 57
		1909	144	14	10 27	18 57
		1910	110	7	15.71	18 57
		1911	152	6	25 33	18 57
17	Innisfail.	1907	542	30	18 06	21.51
		1908	1,190	38	31.31	21.51
		1909	976	53	18.41	21.51
		1910	752	66	11 39	21.51
		1911	1,051	37	28.40	21.51

Rye.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
18	Red Deer.	1907	1,573	81	19.42	18.84
		1908	1,863	126	14.78	
		1909	1,023	35	29.20	
		1910	1,132	114	9.93	
		1911	1,944	93	20.91	
19	Lacombe	1907	2,396	98	24.45	21.52
		1908	2,276	120	18.96	
		1909	3,328	246	14.00	
		1910	4,887	190	25.72	
		1911	4,478	183	24.47	
20	Ponoka	1907	2,921	124	23.55	19.67
		1908	10,620	626	16.96	
		1909	10,379	742	13.98	
		1910	13,887	630	22.04	
		1911	13,594	622	21.85	
21	Wetaskiwin.	1907	114	6	19.00	22.01
		1908	272	12	22.66	
		1909	2,403	118	20.36	
		1910	616	33	18.67	
		1911	1,969	67	29.89	
22	Leduc	1907	.	.	.	12.00
		1908	72	4	18.00	
		1909	.	.	.	
		1911	36	6	6.00	
23	Camrose .	1907	386	32	12.06	16.92
		1908	898	46	19.52	
		1909	1,317	77	17.10	
		1910	1,233	79	15.61	
		1911	1,850	91	20.33	
24	Alexandra	1907	.	.	.	14.12
		1908	.	.	.	
		1909	224	11	20.36	
		1910	.	.	.	
		1911	875	111	7.88	
25	Vermilion .	1907	.	.	.	20.96
		1908	24	1	24.00	
		1909	.	.	.	
		1910	.	.	.	
		1911	663	37	17.92	
26	Vegreville .	1907	.	.	.	17.56
		1908	927	56	16.55	
		1909	212	8	26.50	
		1910	453	47	9.63	
		1911	.	.	.	
27	Strathcona	1907
		1908	.	.	.	
		1909	.	.	.	
		1910	.	.	.	
		1911	.	.	.	

RYE.—*Continued.*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
28	Stony Plain	1907	58	13	4 46	8.73
		1908	..	..	..
		1909	68	5	13 60	
		1910				
		1911				
29	Lac Ste. Anne	1907				..
		1908				
		1909				
		1910				
		1911				
30	Pembina	1907				
		1908				
		1909				
		1910				
		1911				
31	St. Albert	1907				
		1908				
		1909				
		1910				
		1911				
32	Sturgeon	1907				19.62
		1908	132	8	16.50	
		1909				
		1910	341	15	22 75	
		1911				
33	Victoria	1907				17.38
		1908	453	21	21.57	
		1909	711	45	15 80	
		1910	503	34	14 79	
		1911				
34	Pakan	1907				17 62
		1908	84	3	28.00	
		1909	364	16	22.75	
		1910	972	58	16.76	
		1911	556	27	20 59	
35	Athabasca	1907				..
		1908				
		1909				
		1910				
		1911				
36	Peace River	1907				15.60
		1908				
		1909				
		1910				
		1911	78	5	15 60	

SPELTZ.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
1	Cardston	1907				
		1908	356	31	11.48	
		1909	214	12	17.83	14.65
		1910				
		1911				
2	Macleod	1907				
		1908				
		1909				.....
		1910				
		1911				
3	Lethbridge	1907	418	10	41.80	
		1908	670	44	15.22	
		1909	109	5	20.80	25.97
		1910				
		1911				
4	Pincher Creek	1907				
		1908	34	1	34.00	
		1909	569	12	46.75	43.56
		1910				
		1911	949	19	49.95	
5	Claresholm	1907	695	36	19.30	
		1908	2,798	160	17.48	
		1909	836	44	19.00	18.38
		1910				
		1911	656	37	17.76	
6	Medicine Hat	1907	5	1	5.00	
		1908	10	3	3.33	
		1909	933	29	32.16	15.91
		1910				
		1911	625	27	23.15	
7	Nanton	1907	136	10	13.60	
		1908				
		1909				13.60
		1910				
		1911				
8	High River...	1907				
		1908				
		1909				.....
		1910				
		1911				
9	Rocky Mountain...	1907				
		1908				
		1909				.....
		1910				
		1911				
10	Okotoks	1907				
		1908				
		1909				
		1910				
		1911				

SPELTZ.—*Continued.*

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield	
11	Cochrane	1907	420	21	20 00	20.00	
		1908					
		1909					
		1910					
		1911					
12	Gleichen	1907	2,513	69	36 42	24 54	
		1908					
		1909	38	3	12 66		
		1910					
		1911					
13	Didsbury	1907	564	38	14 84	18 43	
		1908					
		1909	718	22	32.63		
		1910	94	12	7 83		
		1911					
14	Olds	1907	514	22	24 59	20.39	
		1908					
		1909	162	10	16 20		
		1910					
		1911					
15	Stettler	1907	1,082	45	24 04	31 23	
		1908	163	3	54 32		
		1909	761	39	19 33		
		1910					
		1911	1,992	70	28 46		
16	Sedgewick	1907	342	17	20 11	17 64	
		1908	356	32	11 12		
		1909	738	28	26 35		
		1910	26	2	13 00		
		1911					
17	Innisfail..	1907				.	
		1908					
		1909					
		1910					
		1911					
18	Red Deer. . . .	1907				..	
		1908					
		1909					
		1910					
		1911					
19	Lacombe.	1907				.	
		1908					
		1909					
		1910					
		1911					
20	Ponoka.	1907				.	
		1908					
		1909					
		1910					
		1911					

SPELTZ.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
21	Wetaskiwin	1907	100	2	50.00	49.00
		1908	96	2	48.00	
		1909				
		1910				
		1911				
22	Leduc	1907				25.16
		1908	224	7	32.00	
		1909	55	3	18.33	
		1910				
		1911				
23	Camrose	1907	300	16	18.75	20.35
		1908				
		1909				
		1910				
		1911	988	45	21.96	
24	Alexandra	1907				25.40
		1908				
		1909				
		1910				
		1911	127	5	25.40	
25	Vermilion	1907				19.92
		1908	129	7	18.42	
		1909	150	7	21.42	
		1910				
		1911				
26	Vegreville	1907	284	15	18.92	24.32
		1908	360	10	36.00	
		1909	542	30	18.06	
		1910				
		1911				
27	Strathecona	1907				
		1908				
		1909				
		1910				
		1911				
28	Stony Plain	1907				
		1908				
		1909				
		1910				
		1911				
29	Lac Ste. Anne	1907				26.00
		1908	26	1	26.00	
		1909				
		1910				
		1911				
30	Pembina	1907				
		1908				
		1909				
		1910				
		1911				

SPELTZ.—Continued.

No.	CROP DISTRICT	Year	Bushels	Acreage	Yield per acre	Average yield
31	St Albert.	1907				
		1908				
		1909				
		1910				
		1911				
32	Sturgeon.	1907				
		1908				
		1909				
		1910				
		1911				
33	Victoria	1907				
		1908				
		1909	170	7	24 29	24 29
		1910				
		1911				
34	Pakan	1907				
		1908	15	1	15 00	
		1909				15 00
		1910				
		1911				
35	Athabasca	1907				
		1908				
		1909				
		1910				
		1911				

SUMMARY OF THE ACREAGE AND YIELDS OF THE LEADING GRAINS DURING THE
LAST TWELVE YEARS.

	YEAR	Crop area in acres	Total yields in bushels	Average yield per acre	Average yield
Spring Wheat.	1911	757,493	15,730,238	20.75	
	1910	450,493	5,697,956	12.85	
	1909	324,472	6,155,455	18.97	
	1908	212,677	4,001,504	18.81	
	1907	123,935	2,261,610	18.25	
	1906	115,502	2,664,661	23.07	
	1905	75,353	1,617,505	21.46	
	1904	47,411	786,075	16.58	19 52
	1903	59,951	1,118,180	18.65	
	1902	45,064	850,122	18.86	
	1901	34,890	857,714	24.58	
	1900	30,361	583,806	19.22	
Winter Wheat....	1911	182,671	4,336,749	23.74	
	1910	142,467	2,206,564	15.48	
	1909	102,167	2,312,344	22.63	
	1908	104,956	3,093,422	29.47	
	1907	83,965	1,932,925	20.66	
	1906	61,625	1,301,359	21.11	21 86
	1905	32,174	689,019	21.41	
	1904	8,296	152,125	18.33	
	1903	3,440	82,418	23.95	

SUMMARY OF THE ACREAGE AND YIELDS OF THE LEADING GRAINS DURING THE
LAST TWELVE YEARS.—*Continued.*

	YEAR	Crop area in acres	Total yields in bushels	Average yield per acre	Average yield
Oats	1911	669,827	27,604,993	41.21	34.68
	1910	492,589	12,158,530	24.68	
	1909	693,901	24,819,661	35.76	
	1908	431,145	15,922,974	36.93	
	1907	307,093	9,247,914	30.11	
	1906	335,728	13,136,913	39.12	
	1905	242,801	9,514,180	39.18	
	1904	180,698	5,609,496	31.04	
	1903	162,314	5,187,511	31.95	
	1902	118,997	3,776,976	31.74	
	1901	104,533	4,253,284	40.68	
	1900	77,616	2,625,581	33.82	
Barley.	1911	103,302	3,037,584	29.41	26.12
	1910	90,901	1,889,509	20.79	
	1909	107,764	3,310,332	30.72	
	1908	77,876	1,949,164	25.03	
	1907	54,698	1,082,460	19.78	
	1906	73,588	2,157,957	29.32	
	1905	64,830	1,773,914	27.36	
	1904	61,549	1,608,241	26.12	
	1903	42,219	1,077,274	25.51	
	1902	22,201	473,108	21.31	
	1901	13,483	442,381	32.81	
	1900	9,256	234,971	25.37	
Flax	1911	16,549	153,908	9.30	9.86
	1910	15,271	46,155	3.02	
	1909	12,479	131,531	10.54	
	1908	9,262	73,762	7.96	
	1907	6,488	50,002	7.87	
	1906	3,647	38,491	10.65	
	1905	531	8,337	14.34	
	1904	367	5,003	13.63	
	1903	830	7,753	9.34	
	1902	373	4,476	12.00	
Rye.	1911	2,190	38,722	17.68	18.03
	1910	1,522	28,306	18.60	
	1909	1,592	25,801	16.20	
	1908	1,250	22,625	18.10	
	1907	591	10,595	17.91	
	1906	1,139	22,462	19.70	
Speltz..	1911	203	5,337	26.29	22.17
	1910	18	164	9.11	
	1909	269	6,369	23.67	
	1908	484	9,697	20.03	
	1907	151	3,346	22.15	
	1906	385	11,423	29.67	
	1905	178	4,419	24.82	
	1904	112	2,426	21.66	

	Total crop area	Total yield of grain
1911.	1,732,648	50,907,531
1910.	1,193,261	22,027,184
1909.	1,242,644	36,761,493
1908.	837,641	25,073,147
1907.	576,821	14,588,852
1906.	591,614	19,333,266
1905.	415,917	13,607,374
1904.	298,433	8,163,366

III—VITAL STATISTICS.

The constant stream of newcomers to the province, many of whom do not speak the English language, makes it very difficult indeed to obtain as full and complete returns of births, marriages and deaths as could be desired. The department has posters in four different languages for distribution, giving a synopsis of the Act, which are sent to all newly appointed registrars, but it takes time for this knowledge to filter through the widely scattered, newly made settlements. Postmasters have been appointed as registrars wherever possible and gradually people will learn what is required of them. The new settler, however, is not the only offender. Many of the physicians fail to report events as quickly as they should, and frequently not at all. In the case of births, although the Act calls for registration within one month, yet it allows names to be entered for a period of two years. All this tends to delay a final statement of the total number of births for any year.

New Appointments.—During the year 54 new appointments of registrars were made; 20 resignations accepted and the vacancies filled; and seven appointments were withdrawn where post offices were discontinued. There were at the end of the year 705 registrars on the roll.

Certified Abstracts, Searches of Record, etc.—During the year 285 applications were received for certified abstracts, 38 searches of the records made upon request, and 183 authorities to register events were granted.

BIRTHS.

The total number of births recorded during the year 1911 was 8,813, only a slight increase over that of 1910. The males numbered 4,623 and the females 4,190.

MARRIAGES.

The registrations of marriages received during the year were 3,630 as against 3,086 for 1910. The mean marriage age for males was 28.46 and for females 23.84. The records show that 13 brides were married under the age of 16, while 17 bridegrooms and four brides were married at the age of 60 and over.

DEATHS.

The total number of death registrations received for the year 1911 was 3618. Of these 2,092 were males and 1,526 females. A serious aspect is the fact that 651 males and 534 females, or a total of 1,185 deaths are recorded under one year of age. This means that of the 8,813 births, 1,185 die under 12 months of age. Put in another way this means an infant mortality of 12.49 per cent.

TOTAL REGISTRATIONS received of all Births, Marriages and Deaths for each respective month of the year 1911.

MONTH	BIRTHS	MARRIAGES	DEATHS
January	789	217	382
February	618	289	305
March	671	215	290
April . . .	616	296	323
May .	734	242	307
June.	698	384	262
July . . .	744	289	313
August..	770	306	307
September	905	309	330
October. . .	1,029	357	282
November	760	355	261
December	479	371	256
Totals.	8,813	3,630	3,618

VITAL STATISTICS RETURNS, 1905 TO 1911 (INCLUSIVE).

YEAR	BIRTHS	MARRIAGES	DEATHS	TOTAL
1905	421	187	114	722
1906.	3,033	927	1,091	5,051
1907.	4,732	1,907	1,578	8,217
1908 .	5,973	2,032	2,188	10,193
1909	6,897	2,384	2,662	11,943
1910	8,231	3,086	3,526	14,843
1911	8,813	3,630	3,618	16,061
Total.	38,100	14,153	14,777	67,030

CERTIFIED EXTRACTS, SEARCHES AND AUTHORITIES TO REGISTER, 1911:

285 Certified Extracts.
 183 Authorities to Register.
 38 Searches of Records.

REGISTRATIONS received from Registrars throughout the respective Electoral Districts, 1911.

Births by Electoral Districts.

ELECTORAL DISTRICT	MALE	FEMALE	TOTAL
Alexandra	97	92	189
Athabasca	49	34	83
Camrose	130	129	259
Cardston	72	73	145
Claresholm	84	81	165
Cochrane	35	36	71
Didsbury	91	95	186
Gleichen	72	73	145
High River	52	47	99
Innisfail	47	45	92
Lacombe	25	35	60
Lac Ste. Anne	42	33	75
Leduc	83	83	166
Lethbridge	190	187	377
Macleod	42	35	77
Medicine Hat	272	227	499
Nanton	51	59	110
Okotoks	16	17	33
Olds	92	65	157
Pakan	215	176	391
Peace River	4	1	5
Pembina	25	31	56
Pincher Creek	39	30	69
Ponoka	37	15	52
Red Deer	52	59	111
Rocky Mountain	96	91	187
Sedgewick	179	174	353
St. Albert	107	83	190
Stettler	193	182	375
Stony Plain	45	47	92
Strathcona	126	116	242
Sturgeon	55	45	100
Vermilion	118	102	220
Vegreville	383	342	725
Victoria	112	117	229
Wetaskiwin	61	55	116
Calgary City	716	585	1,301
Edmonton City	351	367	718
Lethbridge City	167	126	293
Totals	4,623	4,190	8,813

REGISTRATIONS received from Registrars throughout the respective Electoral Districts, 1911.

BIRTHS BY ELECTORAL DISTRICTS	MONTHS												Total
	January	February	March	April	May	June	July	August	September	October	November	December	
Alexandra.	16	15	6	9	8	13	22	19	24	33	14	10	189
Athabasca	7	7	13	10	7	5	11	3	5	6	6	3	83
Camrose .	24	16	23	18	22	18	22	29	17	39	20	11	259
Cardston	11	12	3	17	8	8	13	10	24	19	14	6	145
Clareholm	20	21	6	9	10	14	12	12	25	18	10	8	165
Cochrane	2	3	6	5	9	3	4	7	6	14	6	6	71
Didsbury	17	13	13	17	18	14	10	17	24	22	13	8	186
Gleichen	15	9	4	16	12	13	9	11	21	19	10	6	145
High River	9	10	13	4	10	6	9	9	6	10	7	6	99
Innisfail	11	7	5	5	7	12	8	7	12	4	8	6	92
Lacombe	8	8	6	4	4	6	8	4	6	1	3	2	60
Lac. Ste. Anne	12	7	3	6	4	5	15	3	6	6	6	2	75
Leduc	12	27	13	13	6	10	6	15	16	18	14	16	166
Lethbridge	26	20	44	25	25	13	35	44	59	41	27	18	377
Macleod	8	5	10	7	5	3	7	4	9	13	2	4	77
Medicine Hat	46	53	32	36	42	48	40	53	45	41	40	24	500
Nanton	7	15	12	7	5	5	3	13	13	14	6	10	110
Okotoks.	6	2	4	2	2	2	2	2	3	1	3	3	33
Olds	16	18	15	7	18	13	15	9	15	15	8	8	157
Pakan	37	21	17	29	31	27	32	49	40	50	31	27	391
Peace River									1	3		1	5
Pembina	2	9	3	6	3	9	5	3	8	3	3	2	56
Ponoka	5	4	5	3	4	9	1	2	5	2	5	7	52
Pincher Creek	4	5	7	7	8	8	2	10	2	7	6	3	69
Red Deer.	14	6	5	5	15	6	13	15	13	9	6	4	111
Rocky Mountain	35	8	28	21	23	19	14	3	9	10	10	7	187
Sedgewick	24	18	27	26	34	39	26	43	35	35	31	15	353
St. Albert.	19	8	19	15	14	11	18	21	27	23	9	6	190
Stettler	38	36	26	23	27	38	46	36	28	25	27	25	375
Stony Plain	7	13	5	3	12	9	5	4	10	5	11	7	91
Strathcona.	13	8	27	14	18	18	25	17	25	31	33	13	242
Sturgeon ..	6	7	7	5	6	2	6	9	20	11	8	13	100
Vermilion	20	15	11	11	15	13	11	15	26	42	30	11	220
Vegreville	66	60	70	63	76	70	64	45	42	76	55	38	725
Victoria	23	10	21	11	24	9	14	8	32	42	22	13	229
Wetaskiwin	12	8	19	8	9	10	8	5	15	9	8	5	116
Calgary City	102	63	56	61	102	81	112	152	135	194	165	78	1,301
Edmonton City	56	37	61	61	69	81	62	38	64	88	64	37	718
Lethbridge City.	33	14	26	26	22	28	29	24	32	30	19	10	293
Total	789	618	671	616	734	698	744	770	905	1,029	760	479	8,813

MARRIAGES BY DENOMINATIONS AND AGES.—ELECTORAL DISTRICTS, 1911.

RELIGIOUS DENOMINATIONS OF GROOM AND BRIDE																		ELECTORAL DISTRICTS	AGES											
SEX	Presbyterian	Methodist	Anglican	Roman Catholic	Lutheran	Baptist	Greek Catholic	Latter Day Saints	Mormons	Evangelical R'yd	Mennonite	Salvation Army	Congregationalist	Gr. Ortho. & Ind.	Others	Not Stated			Under 16	16 to 20	21 to 25	26 to 30	31 to 35	36 to 40	41 to 45	46 to 50	51 to 60	Over 60		
Males	13	18	11	7	5	5								1		1	61	Alexandra—	1	22	25	6	2	2	1				61	
Females	8	19	15	8	6	4									1		61		20	25	7	2	6							
Total.	21	37	26	15	11	9								1	1	1	122		1	23	47	32	8	8	2	1				122
Males ..	1	1	1	6													8	Athabasca—	2	4	1	1								8
Females.	1	1	1	6													8		2	6										8
Total.	1	1	2	12													16		4	10	1	1								16
Males....	10	11	4	13	21	2								1			66	Camrose—	1	20	30	8	4	3						66
Females	8	12	4	11	25	2										2	66		28	28	7	2	1							66
Total: . .	18	23	8	24	46	4								1		3	132		29	48	37	10	4	4						132
Males .	1	1	3	4	2									3			36	Cardston—	3	18	9	1	2	1	1		1			36
Females	3	2	3	3	1											2	36		17	12	4	3								36
Total	4	3	6	7	3									3		3	72		20	30	13	4	2	1	1	1				72
Males	11	10	3	2	7	1										3	42	Clareholm—	1	11	12	9	5	3	1					42
Females	9	9	4	10	1	2				1	1			1		2	42		1	17	16	4	2	2						42
Total...	20	19	7	2	17	2				1	1			1		5	84		1	18	27	16	11	7	3	1				84

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MARRIAGES BY DENOMINATIONS AND AGES.—ELECTORAL DISTRICTS, 1911.—Continued.

SEX	RELIGIOUS DENOMINATIONS OF GROOM AND BRIDE														ELECTORAL DISTRICTS	AGES													
	Presbyterian	Methodist	Anglican	Roman Catholic	Lutheran	Baptist	Greek Catholic	Latter Day Saints	Mormons	Evangelical R.P.d.	Mennonite	Salvation Army	Congregationalist	Gr. Ortho. & Ind.		(Others)	Not Stated												
Males	8	9	6	8	12	6	15							1	3	5	73		1	30	33	8	1					73	
Females	9	10	5	5	16	5	17							1	3	2	73		31	27	13	2						73	
Total	17	19	11	13	28	11	32							2	6	7	146		32	57	46	10	1					146	
Males	11	9	10	4		1											35		1	6	13	8	4			3		35	
Females	9	9	10	5		1											35		6	12	9	3	4			1		35	
Total	20	18	20	9		2											70		7	18	22	11	8			4		70	
Males	46	31	25	26	39	17	2			8		1	5	1	8	3	209		11	75	71	29	13			4	1	2	209
Females	31	31	37	32	37	6	2	1	12			1	2	1	15	1	209		1	57	87	37	13	5	2	4	2	1	209
Total	77	62	62	58	76	23	4	1	20			2	4	2	23	4	418		1	68	162	108	42	18	5	8	3	3	418
Males	11	8	1			2	2									6	30		2	15	8	2	2			1	2		30
Females	10	7	2			4	2									4	30		19	6	2	1	1			1	1		30
Total	21	15	4			6	4									10	60		21	18	10	2	3			2	3		60
Males	3	2	4	1													10			1	6	2	1						10
Females	4	2	2	1		1											10		3	5	1	1							10
Total	7	4	6	2		1											20		3	6	7	2	2						20

Males.....	7	5	11	1	3	3	1	1	1	2	2	15	13	7	2	2	37
Females	10	7	8	1	3	3	1	1	1	2	2	12	17	6	2	37	37
Total	17	12	19	2	6	6	2	2	2	4	4	27	32	13	4	74	74
Males...	1	8	1	35	1	19	31	3	19	31	3	13	48	25	4	4	99
Females	1	9	2	34	1	19	31	2	19	31	2	70	15	4	2	2	99
Total	1	17	3	69	2	38	62	5	1	62	5	83	63	29	6	4	198
Male...																	...
Females																	...
Total																	...
Males...	4	1	1	3													9
Females	4	2	1	1			1					4	1	2		1	9
Total	8	3	2	4			1					4	5	1	4	2	18
Males...	8	1	3	4								1	9	6	3	2	21
Females	7	4	1	6								10	7	2	2	2	21
Total	15	5	4	10								11	16	8	5	2	42
Males...	3	11	2	4	8	3						9	12	10	1	1	35
Females	5	7	5	6	6	1						21	6	6	1	1	35
Total	8	18	7	10	14	4						21	15	18	10	2	70
Males...	16	9	8	3	6	6						18	18	8	5	2	52
Females	16	8	10	3	4	3	1					17	21	11	2	1	52
Total	32	17	18	6	10	9	1					17	39	29	10	6	104
Males...	15	8	17	24	4	4						1	24	23	12	11	74
Females	12	5	15	24	6	8						19	28	16	8	1	74
Total	27	13	32	48	10	12						20	52	39	20	12	148

MARRIAGES BY DENOMINATIONS AND AGES.—ELECTORAL DISTRICTS, 1911.—Continued.

SEX	RELIGIOUS DENOMINATIONS OF GROOM AND BRIDE														ELECTORAL DISTRICTS	AGES													
	Presbyterian	Methodist	Anglican	Roman Catholic	Lutheran	Baptist	Greek Catholic	Latter Day Saints	Moravians	Evangelical R'fd.	Mennonite	Salvation Army	Congregationalist	Gr. Ortho. & Ind.		Others	Not Stated												
Males	21	14	14	3	7	5					1	1	1	1	4	5	77	Sedgewick—	Under 16	16 to 20	21 to 25	26 to 30	31 to 35	36 to 40	41 to 45	46 to 50	51 to 60	Over 60	77
Females	11	21	15	6	6	7				1		1	1	1	2	5	77			33	24	14	2	3	3			1	1	77
Total	32	35	29	9	13	12				1	1	2	2	2	6	10	154		33	50	48	14	6	1			2		154
Males	2	2		31													35	St. Albert—		24	5	3	3						35
Females	1	2		32													35			15	17	3							
Total	3	4		63													70		15	41	8	3	3						70
Males	32	35	16	17	19	5								1	8	8	141	Stettler—		1	51	57	17	9	2			1	141
Females	28	36	17	20	18	9	1						1	1	3	7	141			46	58	25	4	5			2	1	141
Total	60	71	33	37	37	14	1						1	2	11	15	282		47	109	82	21	14	2	5		2	282	
Males		3	1	5	12	1				3					3		28	Stony Plain—		2	13	7	2	1	1		2		28
Females		1	3	5	12	2				3					2		28			1	15	6	4					1	28
Total		4	4	10	24	3				6					5		56		1	17	19	11	2	1	2		2	1	56
Males	23	21	4	8	12	5	1			4					2	4	84	Strathcona—		3	29	33	6	6	1	2	4		84
Females	20	19	7	6	13	5	1			6					2	5	84			28	31	13	2	5	2	2	1		84
Total	43	40	11	14	25	10	2			10					4	9	168		31	60	46	8	11	3	4	5		168	

[illegible]

MARRIAGES—Religious Denominations of Contracting Parties.

		DENOMINATIONS	BRIDEGROOMS																
Officiating Clergymen	Total Brides		Presbyterian	Methodist	Anglican	Roman Catholic	Lutheran	Baptist	Greek Catholic	Latter Day Saints	Moravians	Evangelical R'fd.	Mennonite	Salvation Army	Congregationalist	Gr. Ortho. & Ind.	Others	Not Stated	Total Bridegrooms
984	725	Presbyterians	484	91	71	12	16	26				2	1	1	1	1	7	9	725
792	576	Methodists	80	343	57	13	16	40		1							14	5	576
612	682	Anglicans	95	70	453	7	8	21		1				1	9	2	9	8	682
534	631	Roman Catholics	20	22	27	521	7	8	5	1				1	1	1	5	10	631
201	338	Lutherans	20	21	16	13	241	9			3	1			4	1	6	3	338
207	193	Baptists	30	37	15	2	9	81		1					1	1	10	6	193
78	84	Greek Catholics	1	2		1			81										84
44	50	Latter Day Saints	6				2	2		39	5	17				1		1	50
11	9	Moravians	1	1			2	2					1				1	1	9
35	27	Evangelical Reformed	1	1			3	1					6	12			1	1	27
6	18	Mennonite	1	2			1	2											18
3	31	Salvation Army	1	3	1	1	2	4							6		3		31
8	60	Congregationalists	11	1	1	1	2									56	1		60
50	60	Greek Orthodox and Independent		1	9	5	6	9									70	2	130
59	130	Others	11	17	6	7	2	2		3								40	67
6	67	Not Stated	7																
3,630	3,630		767	611	655	583	316	205	86	46	8	20	11	15	32	61	128	86	3,630

MARRIAGES—Origin of Contracting Parties.

BRIDEGRROOMS															
		BRIDES	English Speaking Countries					Others							
			Canada	United Kingdom	United States	Other British Colonies	Totals	Germany	Russia	Austria	Norway & Sweden	France	Italian	Galician	Others	Totals
English Speaking Countries	Canada . . .	656	184	171	3	1,014	3	9	5	7	3	1	7	1,049	
	United Kingdom	158	777	90	6	1,031	5	1	4	5	2	12	8	1,060	
	United States	231	95	400	6	732	8	12	1	22	1	1	784		
	Other British	4	5		2	11								11	
	Total	1,049	1,061	661	17	2,788	16	22	6	33	8	3	1	27	2,904
Others	Germany	6	8	6		20	19	2	1	1		1	4	48	
	Russia	5	3	17		25	6	118	4	1			2	156	
	Austria	4	1	7		12		2	237	1		1	2	256	
	Norway and Sweden	6	1	12	1	20	1	2	72					95	
	France		4			4	1			8	1		1	15	
	Italian			1		1					10		1	10	
	Galician					1		2	1			79	1	86	
Others	8	5	4		17	2	2	1	3			36	60		
Totals		1,078	1,084	708	18	2,887	45	146	253	110	19	15	82	73	3,650

DENOMINATIONS OF OFFICIATING CLERGYMEN.

Presbyterian . .	984
Methodist . . .	792
Anglican. . . .	612
Roman Catholic	534
Lutheran	201
Baptist	207
Greek Catholic	78
Latter Day Saints	44
Evangelical Reformed	35
Moravian	11
Mennonite.	6
Salvation Army	3
Congregationalist	8
Greek Orthodox and Independent	50
Others	59
Not Stated	6
Total	3,630

MEAN MARRIAGE AGE.

YEAR	MALE	FEMALE	YEAR	MALE	FEMALE
1901	28.78	22.42	1907	27.45	23.98
1902	27.10	22.88	1908	30.23	24.19
1903	28.31	22.98	1909	28.94	24.22
1904	28.53	23.41	1910	28.72	24.18
1905	28.34	23.06	1911	28.46	23.84
1906	28.82	22.50			

BIRTHS AND RATIO OF BIRTHS TO DEATHS.

YEAR	Births of Males to 1,000 births of Females	Ratio of Births to Deaths	YEAR	Births of Males to 1,000 births of Females	Ratio of Births to Deaths
1901	1,081	3.55	1907	1,075	2.96
1902	1,010	2.59	1908	1,077	2.73
1903	1,056	2.95	1909	1,086	2.59
1904	1,118	3.04	1910	1,065	2.69
1905	1,059	3.11	1911	1,103	2.43
1906	1,094	2.07			

DEATHS OF INFANTS, UNDER ONE YEAR.

To 1,000 births 1911	134.46
To 1,000 deaths from all causes 1911	327.52

REGISTRATIONS RECEIVED FROM REGISTRARS THROUGHOUT THE RESPECTIVE ELECTORAL DISTRICTS, 1911.

DEATHS BY ELECTORAL DISTRICTS				UNDER ONE YEAR	
ELECTORAL DISTRICTS	Male	Female	Total	Male	Female
Alexandra	23	18	41	14	9
Athabasca	32	25	57	5	4
Camrose	35	26	61	6	8
Cardston	30	24	54	13	11
Claresholm	19	21	40	3	10
Cochrane	19	13	32	3	7
Didsbury	42	43	85	15	15
Gleichen	28	18	46	10	7
High River	25	19	44	13	7
Innisfail	23	13	36	11	3
Lacombe	24	24	48	4	5
Lac Ste. Anne	43	14	57	5	4
Leduc	29	11	40	10	6
Lethbridge	68	40	108	20	16
Macleod	33	12	45	7	5
Medicine Hat	112	90	202	34	38
Nanton	25	10	35	8	2
Okotoks	7	9	16	1	2
Olds	31	27	58	16	6
Pakan	75	47	122	23	22
Peace River	6	2	8	1	
Pembina	8	6	14	2	1
Pincher Creek	20	15	35	6	5
Ponoka	16	17	33	5	3
Red Deer	40	16	56	5	3
Rocky Mountain	50	20	70	19	10
Sedgewick	50	37	87	20	8
St. Albert	40	31	71	18	17
Stettler	70	64	134	16	18
Stony Plain	6	13	19	2	4
Strathcona	44	31	75	18	10
Sturgeon	12	11	23	8	3
Vermilion	14	22	36	7	8
Vegreville	91	91	182	31	30
Victoria	28	46	74	11	17
Wetaskiwin	31	27	58	8	4
Calgary City	440	309	749	140	127
Edmonton	273	182	455	74	61
Lethbridge City	130	82	212	39	18
Total	2,092	1,526	3,618	651	534

REGISTRATIONS RECEIVED FROM REGISTRARS THROUGHOUT THE RESPECTIVE
ELECTORAL DISTRICTS, 1911.

DEATHS BY ELECTORAL DISTRICTS	MONTHS												
	January	February	March	April	May	June	July	August	September	October	November	December	Total
Alexandra	4	2	1	3	6	4	4	1	2	4	7	3	41
Athabasca	3	2	5	5	4	5	7	6	8	3	1	8	57
Camrose	4	4	7	3	8	12	9	4	1	3	1	5	61
Cardston	6	5	4	1	3	1	6	11	9	1	1	7	54
Claresholm	5	3	5	6	6	3	1	1	6	2	1	1	40
Cochrane	5	3	1	2	2	2	3	1	2	4	4	3	32
Didsbury	19	7	8	9	7	8	3	1	6	4	7	6	85
Gleichen	5	6		6	4	6	4	1	6	1	4	3	46
High River	5	5	6	4	8	2	2	3	2	4	1	2	44
Innisfail	4	5	3	4	4	1	3	3	1	2	3	3	36
Lacombe	6	7	7	5	3	5	3	6	3	3			48
Lac Ste. Anne	5	8	5	3	2	3	5	3	8	6	6	3	57
Leduc	6	2	3	9	2	2	1	3	5	3	1	3	40
Lethbridge	17	16	9	11	8	5	8	8	9	4	8	5	108
Macleod	4	4	3	3	1	3	3	4		8	4	4	45
Medicine Hat	13	15	24	12	24	13	31	17	17	12	13	11	202
Nanton	4	2	3	5	3	6	1	1	3	1	2	4	35
Okotoks	3	2	2	3	1	1	2	1	1				16
Olds	8	4	2	6	8	3	5	4	7	7	2	2	58
Pakan	16	17	15	16	7	11	8	11	6	5	4	6	122
Peace River	2	2		1	1		3						8
Pembina	1	3	1	2	1	1	1		1	1		2	14
Pincher Creek	6	3	3	3	1	2	2	3	3	5	3	1	35
Ponoka	3	3	2	2	4	3	2	6	2	3	1	2	33
Red Deer	4	5	6	4	5	1	2	3	5	7	6	8	56
Rocky Mount'n	7	5	2	8	10	5	5	4	6	9	3	6	70
Sedgewick	5	7	7	7	8	4	8	7	9	10	9	6	87
St. Albert	8	6	3	12	7	9	2	7	5	6	5	1	71
Stettler	18	10	9	20	11	6	7	12	10	13	10	8	134
Stony Plain	2	3	4	2		2	2		1	2		1	19
Strathcona	8	8	10	8	2	6	4	7	10		6	6	75
Sturgeon	3	1	2	4	1	1	4	1	2	2		2	23
Vermilion	3		4	5	4		2	4	6	4	2	2	36
Vegreville	14	19	17	21	16	12	25	14	17	7	12	8	182
Victoria	10	7	6	9	10	7	4	3	7	1	3	7	74
Wetaskiwin	5	2	7	6	3	4	2	9	7	4	3	6	58
Calgary City	65	47	46	52	74	53	74	77	64	62	74	61	749
Edmonton	41	33	32	29	27	41	38	36	46	55	40	37	455
Lethbridge City	35	22	16	13	11	9	17	24	23	15	14	13	212
Total	382	305	290	323	307	262	313	307	330	282	261	256	3,618

[illegible]



TWO BEDS OF ALBERTA LETTUCE, SHOWING PERFECTION OF HEADS.

IV.—MISCELLANEOUS.

Under this heading is grouped comments on a number of subjects of more or less importance.

IRRIGATION.

The annual meeting of the Western Canada Irrigation Association was held in August at Calgary. The department was represented by the Honourable Duncan Marshall, Minister of Agriculture, and the Deputy Minister. Quite a few delegates were present from British Columbia, but not as many as could be desired. The meeting was a successful one and some very useful papers read. A trip was made to see the new dam which the Canadian Pacific Railway Company's Irrigation Branch is putting in at Bassano on the Bow River to take water for a large block of land in that district. A visit was also made to the company's Demonstration Farm at Strathmore, where the working of the milking machine was shown by Prof. Elliott, the superintendent. Refreshments were served in the shape of a dish of beautiful strawberries grown on the farm under irrigation. The next convention will be held at Kelowna, B.C.

DRY FARMING CONGRESS.

The lessons of 1910 as to the value of careful and intelligent conservation of soil moisture were again enforced in the early part of 1911, so that now many farmers will give greater heed to the methods they follow in cultivating their soil to conserve moisture. Having been so successful the previous year in winning awards at the exposition of dry farmed products in connection with the Dry Farming Congress, the province sent another and better exhibit to the exposition at Colorado Springs in October, 1911, and was fortunate in again securing the first award for the finest display made by any state or province. Besides this numerous individual awards were won for best displays in sections, and in addition twenty-three first prizes and four seconds in vegetables, garden produce and field roots, while in grasses, grains (threshed and in sheaf) and forage plants eighteen first and eleven second awards were secured, a number of them being for best individual displays.

The officials of the department joined hands with the Lethbridge Board of Trade in running a special train to Colorado Springs, where the trophy for the largest delegation was captured, also the holding of the seventh congress in Alberta at Lethbridge. Altogether it was a splendid advertisement for Alberta, and further advantage will be gained by the publicity the province will get during the coming year from the fact that Lethbridge will be the headquarters of the congress for one whole year.

CHANGES IN STAFF.

During the year a number of minor changes in the staff were made—clerks resigning and new ones being appointed, as will always be the case. Owing to the starting of a number of demonstration farms, H. A. Craig, B.S.A., Superintendent of Fairs and Institutes, was selected to take charge of them. His place was filled by the transference of C. E. Lewis, B.A., B.S.A., from the Weed Branch, and Mr. Lewis was succeeded in turn by the appointment of Angus

McKenny, B.S.A., formerly in charge of agricultural extension work in the county of Essex, Ontario.

In conclusion I wish to state that the thanks of the department are due to the press of the province for their readiness to publish any information furnished, and for their willingness to assist, wherever it lay in their power, the work that the department had in hand. Indeed, it is a great pleasure to state that in whatever direction it looked for assistance in any project it had under way, it always has been accorded hearty support and good wishes.

I have the honour to be, Sir,

Your obedient servant,

GEO. HARCOURT,
Deputy Minister of Agriculture.

2.—REPORT OF THE DAIRY COMMISSIONER.

SIR.—I have the honour to submit herewith the report of the Dairy Commissioner's Branch for the year ending December 31, 1911, under the following heads, viz.:

- I.—General.
- II.—List of Creameries operated in 1911.
- III.—List of Cheese Factories operated in 1911.
- IV.—Government Operation of Creameries.
- V.—Cream Grading at Creameries.
- VI.—Convention of Creamery Delegates at Innisfail.
- VII.—Dairy School at Innisfail.
- VIII.—Dairy Instruction.
- IX.—Exhibition Work.
- X.—Public Meetings.
- XI.—Correspondence.
- XII.—Acknowledgements.

I.—GENERAL.

The past season was, on the whole, very favourable for dairy operations in the province. Feed and native pasturage was plentiful for the dairy stock and there was a brisk demand and good market for all kinds of dairy products.

Several indications point to an early and general expansion of the dairy industry, more particularly perhaps in the districts which are within convenient reach of our larger centres of population. These furnish steadily increasing markets for milk and cream for direct consumption. Many farmers who have in past years patronized local creameries during the summer season are now catering to the milk and cream trade in our cities throughout the year, receiving handsome returns. That branch of the dairy trade is within certain limits more remunerative to the dairyman than is the butter or cheese market; it is also more exacting in the matter of quality and condition of the milk and cream and in the regularity of supply, factors which tend to establish dairy operations upon a more permanent and profitable basis.

NEW CREAMERIES.

It may be recorded here, also, as a significant fact, that creamery associations were organized and creamery plants erected at the following points in the southern portion of the province during the past season, viz.: Cardston, Magrath, Seven Persons, Claresholm, Macleod, Nanton, High River, Gleichen and Cochrane. This may be taken as an indication that while in nearly all of these sections of the country where wheat is generally regarded as "king" the dairy cow will eventually be acknowledged "queen." There is little doubt that as land values increase the necessity for more diversified farming will make itself more and more felt.

The creamery associations referred to in the foregoing have established well equipped creameries at considerable expense and it is but fair to assume that they have all satisfied themselves that they will have sufficient patronage and cream supply from their own immediate localities to operate their creameries successfully. It should be borne in mind that unless there is a sufficient cream supply available for it a creamery is a poor, if not worthless, asset both to its owners and to its patrons.

The great majority of farmers look upon their local creamery, whether it be operated upon the proprietary or nominally co-operative principle, merely as an alternative market for their milk and cream. If the local creamery is not able at all times to pay them at least as high prices as they are offered elsewhere they are not likely to patronize it regularly.

While it is impossible for anyone to say at the outset just what a local creamery will be able to do for the farmers of the district in which it is located we may take advantage of the experience of creameries that have been operated during the past few years and bring out certain facts and figures to demonstrate that under certain conditions a creamery may pay its patrons a good price for their cream while under different conditions, the market price of butter being the same, it cannot pay nearly as much on account of relatively high running expenses.

There are certain fixed charges in connection with the operation of any manufacturing establishment and so it is with a creamery. The following table A, items 1 to 7 inclusive, shows what are practically fixed charges in the operation of a creamery, and any one who looks into the matter closely will find that under certain conditions these fixed charges may be made comparatively light per unit of production while under different conditions they will of necessity be comparatively heavy:

TABLE A.

1. Labour in creamery.
2. Fuel and ice.
3. Maintenance of building and plant.
4. Management and office.
5. Interest and taxes.
6. Insurance on building, plant and stock.
7. Depreciation.
8. Supplies and packages.
9. Freight and cartage.

The thing to remember is that the total expense, both fixed and pro rata involved in the operation of a creamery must be met from the proceeds of the sales of its finished product. In other words, the operating expenses must be paid before the patrons receive

final returns for their cream, and this applies more particularly to creameries conducting their business on the co-operative principle where the patrons receive the total proceeds less the operating expenses and where little or no provision is made for a working capital to take care of a portion of them during the "slack" period of the season.

The following table B demonstrates what every creamery operator has learned by experience, that a large butter output means a comparatively low, and a small butter output a comparatively high manufacturing expense per unit of production. The figures have been compiled from the manufacturing accounts of twenty-one creameries operated by the department a couple of seasons ago. The creamery accounts are, for this purpose, divided into groups according to the season's butter output as shown in the left hand column. To the right is given the average cost in cents per pound of butter of the services specified under headings 1, 2, 3, 8 and 9 in table A. The expenses under 4, 5, 6 and 7 varied according to local conditions, capital invested, etc., and are not given. The purpose of this table is to give merely the figures for what may be called strictly current manufacturing expenses.

TABLE B.

Up to 10,000 lbs	8.75 cents
10 to 20,000 lbs.	4.97 "
20 to 30,000 lbs	4.17 "
30 to 40,000 lbs	3.55 "
40 to 50,000 lbs	3.50 "
60 to 70,000 lbs	3.21 "
80 to 90,000 lbs.	3.06 "
90 to 115,000 lbs	2.86 "

Hence, taking the outside figures and allowing full salary to the buttermakers the bare current manufacturing expense was six cents more per pound of butter at creameries having an output of up to 10,000 pounds for the season than at the creamery making 115,000 pounds.

Assuming now that the creameries in each of the several groups had an equally good market for their butter and that all their current manufacturing expenses had to be met out of the proceeds from the sales of their products it will be readily seen that the net returns to the patrons would of necessity vary considerably and at the smaller creameries fall below the point at which creamery patronage would be considered profitable.

In the foregoing comparison we have not included the cost of the items numbered 4, 5, 6 and 7, for the reasons stated, but they will certainly have to be taken into account in actual creamery operations. The point I wish to make here is that a properly constructed, properly equipped and efficiently operated creamery with a small butter output is, in open competition, unprofitable to its operator or to its patrons—or to both.

As the general expansion of our dairy industry will eventually necessitate the establishment of additional creameries the promoters of new creameries or, rather, the people who are to foot the bill will be well advised to consider carefully, before committing themselves to any considerable expenditure, whether a new creamery in a given locality has a reasonable chance to become a successful public service institution. A careful consideration will naturally include a survey of (1) present competitive agencies, (2) alternative markets, (3) extent of local patronage that may be economically secured and

held by ordinary good management. In the case of a proposed co-operative creamery the survey should include the attitude of the people of the district, more especially the prospective patrons and stockholders, towards the principle and practice of co-operation in that business. A clear understanding of these factors and of the business of creamery operation should enable the people who are most concerned to avoid the pitfalls which have been the undoing of many creameries here and elsewhere, and to build on a solid foundation when they find that time and conditions are ripe for action.

DAIRY STOCK.

Another sign of the times is the increasing demand for good dairy cattle. A number of local breeders are continually importing from Eastern Canada pure bred breeding stock and find a ready demand for all the young animals they have for sale. Several of the breeders have cows entered in the Record of Performance Test of the Dominion and one breeder has animals entered in the Authenticated Milk and Butter Fat Test of the American Jersey Cattle Club. In order to facilitate and encourage this work the department has in the past furnished the services of test inspectors

While on this subject, I believe that the time is at hand when with increasing attention to diversified farming our dairymen will devote greater efforts toward the grading up of their present stock for dairy purposes through better feeding, judicious selection and breeding. A frequent and systematic use of the weighing scales and the Babcock tester will reveal many excellent yielders among the cows of the common stock which will furnish good foundation material for profitable grade dairy herds. The work of cow testing associations in the older dairy districts of Canada and elsewhere has been of great benefit to the participating dairymen and it will give the same results here once it is taken up in earnest. First, however, we must have better feeding and care of the animals, especially in winter. Unless and until a dairy cow is fed up to her capacity for milk production the scales and tester can give no reliable information about her as an economic producer. I am pleased to be able to include in this report the manuscript of an address given by Mr. W. F. Stevens, Live Stock Commissioner, before the Dairy Convention at Innisfail on the subject of the feeding and care of dairy stock.

APPOINTMENT OF DAIRY INSPECTORS.

Under the provision of section 38 of chapter 16 of the statutes of 1907 and amendments thereto, entitled "The Dairymen's Act" the Minister of Agriculture was pleased to appoint as dairy inspectors Christian Peter Marker, Calgary; Herbert Shanley Pearson, Red Deer; and George William Scott, Innisfail, under date of May 4th, 1911.

CREAMERY BUTTER PRODUCTION.

Notwithstanding the greatly increasing demand for milk and cream for direct consumption in our cities and towns and good local markets for homemade butter the reported butter output of the 56 creameries operated in the province during 1911 was in round numbers 2,540,000 pounds valued at \$635,000, as against 2,315,000

pounds manufactured in 60 creameries and valued at \$575,000 for the preceding year, an increase of about 10 per cent.

CHEESE PRODUCTION.

Eight cheese factories were in operation during the past season and their combined cheese production was about 50 tons, valued at \$14,000, as against an output of 110 tons of eleven factories valued at \$27,500 for the season of 1910.

II.—CREAMERIES OPERATED IN ALBERTA, 1911.

NAME OF CREAMERY	PROPRIETOR	P.O. ADDRESS
1. Bottrel	J. T. Boucher	Bottrel.
2. Bawlf.	J. E. Hansen	Bawlf.
3. O. K. Creamery.	O. K. Creamery Co	Morningside.
4. Beaver Lake	Beaver Lake Farmers' Creamery Association	Ryley.
5. Duvernay Creamery Ass'n	F. N. Therrien, Secretary	Duvernay.
6. Olds Creamery Association	W. Hamilton, Secretary	Olds.
7. Blackfalds Creamery Ass'n.	James McNicholl, Secretary	Blackfalds.
8. Innisfail Union Butter and Cheese Manufacturing Association	L. C. Harry, Secretary	Innisfail.
9. Markerville Creamery Ass'n	D. Morkeberg, Secretary	Markerville.
10. Red Deer Butter and Cheese Manufacturing Ass'n	E. Carswell, Secretary	Red Deer.
11. Stettler	Alberta Produce Co	Stettler.
12. Wetaskiwin Dairy Ass'n	Wetaskiwin Dairy Association.	Wetaskiwin.
13. The Battle River Creamery Association	Jas. D. Stewart, Secretary	Ferry Bank.
14. Viking Co-operative Creamery Association	Jas. C. Barker, Secretary	Viking.
15. Daysland Creamery Ass'n	W. W. MacGregor, Secretary	Daysland.
16. Lake View Creamery Ass'n	Donald Cameron, Secretary	Lake View.
17. Conjuring Creek Creamery Association.	Wm. Hudson, Secretary	Buford.
18. Blind Man Valley Creamery Association	John H. Beeley, Secretary	Rimbey.
19. Spring Lake Dairy Ass'n	A. Lannan, Secretary	Spring Lake.
20. Neapolis	A. E. Lyons.	Neapolis.
21. Ferintosh	Hanson & Johnstone	Ferintosh.
22. White Swan	Fred H. Hunter, Manager	Bowden.
23. Wild Rose	A. Barrett	Ponoka.
24. Golden Rod	T. A. Brereton	Clive.
25. Three Hills	A. W. Pratt	Three Hills.
26. Bentley	J. F. Millar	Bentley.
27. Golden Rose	The J. Harris Co., Limited	Camrose.
28. Lakeside	The Leduc Produce Co	Leduc.
29. Mayton	J. H. Cameron	Mayton.
30. Knee Hill	Nelson & White	Sunny Slope.
31. Carbon	Blois & Davies	Carbon.
32. Parisian	H. de Reinach-Werth	Trochu.
33. Meeting Creek Creamery	A. Skalleberg & Co	Meeting Creek.
34. Pine Lake	Trimble & Edwards	Pine Lake.
35. Trimble	H. W. Trimble	Red Deer.
36. Clover Hill.	F. N. Ballard	Didsbury.
37. Pincher Creek	McKerricker Bros	Pincher Creek.
38. Red Lodge	Colin Thomson.	Red Lodge.
39. Edmonton City Dairy	Edmonton City Dairy, Limited	Edmonton.
40. Lilly Bank	J. E. Cunningham	Vegreville.
41. Blue Bell	W. A. Brodie & Co	Mannville.
42. Lacombe	G. A. Anderson	Lacombe.
43. Riviere Qui Barre	Joseph Poirier	Riviere Qui Barre.
44. New Norway	The J. Harris Co	Camrose.
45. Quarrel	John A. Brown	Quarrel.
46. Elkton	R. H. McNair	Elkton.

NAME OF CREAMERY	PROPRIETOR	P.O. ADDRESS
47. Black Diamond.	Buckler & Gilson	Black Diamond.
48. Calgary Central	P. Pallesen.	Calgary.
49. Wetaskiwin	Wetaskiwin Produce Co	Wetaskiwin.
50. C.P.R. Demonstration Farm	C.P.R. Co.	Strathmore.
51. Morinville.	Noe Beaupre	Morinville.
52. The Carlyle Dairy Co.	Carlyle Bros..	Calgary.
53. The Alberta Central	W. B. Podmore.	Edmonton.
54. The Cardston Creamery Ass'n	D. S. Beach, Secretary	Cardston.
55. The High River Creamery Association.	Geo. Young, Secretary.	High River.
56. Birch Lea.	Park Bros . . .	Sion.

III.—CHEESE FACTORIES IN ALBERTA OPERATED IN 1911.

FACTORY	PROPRIETOR	P.O. ADDRESS
Eckville	} T. B. Millar	Red Deer.
Piteox.		
Kunsamo	Henry Poulin, Secretary	Vegreville.
Vegreville		
Sturgeon River	Napoleon Auclair	Lamoureux.
Copland..	F. M. Copland	Raven.
St. Paul de Metis	O. Massicotte	St. Paul de Metis.
Erskine	Erskine Butter & Cheese Co .	Erskine.

IV.—GOVERNMENT OPERATION OF CREAMERIES.

The arrangement by which the department had for a number of years undertaken the operation and local management of co-operative creameries was discontinued at the beginning of the summer season 1911. So while this work would in future devolve upon the creamery associations individually the department offered to continue the marketing of butter not only for co-operative creameries as in the past but also for privately operated creameries. Table I is a continuation of the statistical information presented in each year's annual report of the department as to patronage, butter output, average price and gross value of the butter of the several government creameries from May 1, 1905, to April 30, 1911. Corresponding particulars of the business of the creameries which commenced operation prior to May 1906, may be found in the report of the Department of Agriculture for 1908.

TABLE I.—SUMMARY OF BUSINESS DONE AT GOVERNMENT CREAMERIES IN ALBERTA, 1906 TO MAY 1, 1911, INCLUSIVE.

NAME OF STATION	Season	No. of Patrons	Inches of Cream Supplied	Lbs. of Cream Supplied	Lbs. of Butter manufactured	Average price realized at Creamery per lb.	Manufacturing Charge per lb.	Number of days in operation	Gross value of product
Calgary	1906	54	24,708 8	16,136	27,169	Cents 21.647	Cents 4	148	\$5,881.38
	1907	14			5,028	23.715	4	90	1,192.42
Innisfail.	1906	233	144,736.8		186,486	21.589	4	187	40,261.03
	1906-7	173	31,333.9		35,380	27.848	4	174	9,852.65
	1907	179	17,953 2		119,834	23.468	3.989	189	28,123.01
	1907-8	97		305,116.2	22,191	30.322	4	181	6,728.81
	1908	157		78,626	115,056	25.674	3.253	168	29,539.38
	1908-9	164		350,405	48,517	25.947	4	196	12,589.17
	1909	218		155,640	155,776	24.051	3.3562	168	37,465.71
	1909-10	155		167,629	34,108	28.246	4	194	9,634.44
	1910			110,389	88,284	25.92	2.01	167	22,882.46
	1910-11				8,972	28.204	1.746		2,530.49
Red Deer.	1906	161	83,088 0		100,036	21.315	4	187	21,323.57
	1906-7	83	17,154 9		20,358	27.882	4	124	5,676.23
	1907	83	12,670 0		53,224	23.481	4	189	12,497.95
	1907-8	69		110,427 7		30.123	4	181	4,497.72
	1908	125		51,866 5	14,931	25.539	3.394	168	22,368.06
	1908-9	142		277,874	87,385	25.813	4	196	11,001.57
	1909	148		145,231	42,620	23.9892	3.9866	168	23,411.43
	1909-10	102		316,523 5	97,591	28.268	4	194	7,207.14
	1910			84,428	25,495	26.01	1.97	167	18,872.76
	1910-11				72,546	28.007	1.6		1,279.18

Wetaskiwin.	1906	100	56,579 7	72,021	21 073	+	195	15,176 95
	1907	38	1,318 3	17,194	22 598	+	189	3,885 64
	1908	32		20,124	24 988	+	146	5,028 61
	1909	37		17,133	23 763	+	168	4,071 33
	1910			28,149	25 82	1 58	167	7,268 65
Markerville,	1906	106	68,523 5	89,471	21 326	+	187	19,080 85
	1906-7	86	17,477 8	20,436	27 882	+	174	5,654 14
	1907	106	17,404 6	82,322	23 227	3 728	189	19,121 02
	1907-8	75		14,907	30 057	+	181	4,480 71
	1908	101		90,951	25 478	3 377	168	23,172 60
	1908-9	102		32,467	25 626	+	196	8,320 03
	1909	120		101,300	23 9617	3 9522	168	23,748 47
	1909-10	101		277,531 5	28 06	+	194	6,882 80
	1910		80,400	24,529	26 04	2 39	167	20,317 01
	1910-11			78,018	28 8	1 795		3,052 33
Olds.	1906	117	80,128 1	105,129	21 376	+	187	22,472 11
	1906-7	63	14,150 3	16,262	27 667	+	174	4,531 88
	1907	114	9,334 3	71,678	23 279	3 77	189	16,686 13
	1907-8	48		9,621	30 118	+	181	2,897 69
	1908	79		35,685	25 518	3 763	168	16,243 94
	1908-9	74		190,450	25 774	+	145	3,118 72
	1909	102		39,588	24,0704	+	168	16,729 90
	1909-10	45		213,920	28 058	+	194	1,594 31
			19,264	5,682				
Blackfalds,	1906	153	67,987 2	90,285	21 12	+	187	19,068 65
	1906-7	53	9,739 8	11,300	27 602	+	174	3,119 06
	1907	83	5,331 4	40,345	23 19	+	189	9,356 22
	1907-8	30		22,657 4	30 021	+	181	2,052 25
	1908	79		6,836	25 493	+	168	11,657 49
	1908-9	64		45,728	25 889	+	196	3,366 99
	1909	44		137,185 7	23 8399	+	168	7,818 79
	1909-10			44,669 9	27 766	+	194	1,895 79
				102,707 2		1 1163		
				26,114 3		1 961		
Lacombe,	1906	108	48,569 1	63,729	20 964	+	187	13,352 51
	1907	19	1,198 5	12,465	22 705	+	134	2,830 28
	1908	15	..	4,970	23 97	+	62	1,191 32

TABLE I.—SUMMARY OF BUSINESS DONE AT GOVERNMENT CREAMERIES IN ALBERTA, 1906 TO MAY 1, 1911, INCLUSIVE.—Continued.

NAME OF STATION	Season	No of Patrons	Inches of Cream Supplied	Lbs. of Cream Supplied	Lbs. of Butter manufactured	Average price realized at Creamery per lb.	Manufacturing Charge per lb.	Number of days in operation	Gross value of product
Beaver Hills.....	1906	21	4,731.1		6,482	Cents 20.208	Cents 4	67	\$1,309.90
Clover Bar.....	1906	47	12,665.8		14,090	20.788	4	132	2,929.18
Earlville.....	1906	141	71,876.0		90,768	21.219	4	216	19,260.13
	1907	65	5,974.9	81,836.5	34,429	22.949	3.988	181	7,901.31
	1908	69		125,680.3	38,714	25.492	3.988	188	9,869.09
	1908-9	74		18,189.6	5,392	24.746	4	47	1,334.33
	1909	86		132,393	40,916	23.7991	4	168	9,737.65
	1909-10	38		4,936.25	1,528	27.905	4	39	426.40
	1910	27		4,813	1,375	28.32	4	27	389.45
Evarts.....	1906	79	35,210.8		37,292	21.126	4	188	7,878.48
	1907	59	4,423.1	60,683.1	23,390	22.819	4	186	5,337.51
	1907-8	19		13,617	3,593	29.974	4	181	1,076.96
	1908	49		84,467.2	26,012	25.418	4	168	6,611.80
	1908-9	32		27,308.3	7,616	25.567	4	196	1,947.19
	1909	44		65,201.3	20,072	23.8879	4	168	4,794.79
	1906	92	43,255.0		54,999	21.081	4	173	11,594.57
Ferry Bank.....	1906-7	60	6,227.2		7,190	27.630	4	109	1,986.61
	1907	89	16,979.7	96,371	53,430	23.17	3.809	188	12,380.11
	1907-8	31		5,568	1,666	30.0	4	26	499.44
	1908	89		130,776.5	44,554	25.435	4	168	11,332.34
	1908-9	55		14,411.5	4,622	25.867	4	68	1,195.61
	1909	70		78,133	27,562	23.7724	4	168	6,552.17
	1910				26,574	25.76	3½	167	6,845.36
	1910-11				1,358	28.044	3½		380.85

Martins.	1906 1907	82 23	95,939 11,494	31,151 3,966	21.52	5 4	153 92	6,017.75 853.49
Pine (reck. (Lakeview)	1906 1907 1907-8 1908 1909 1909-10 1910 1910-11	58 60 18 62 92 64	20,650.3 7,487.2 80,158.9 1,270 92,454.1 160,961 32,566 31,542 1,680	24,274 31,400 317 26,938 47,182 8,266 28,219 25.1 28.044	21.798 23.3404 30.22 25.611 24.0746 28.219 25.1 28.044	4 4 4 4 4 4 2.55 2	117 195 13 158 181 194 167 ..	5,291.47 7,329.05 95.80 6,899.17 11,358.88 2,332.59 7,918.67 471.15
Rosenroll.....	1906 1906-7 1907 1908 1908-9 1909 1910	63 8 40 47 34 56 15	15,752.4 759.3 1,014.8 72,038 20,633	20,506 848 11,722 26,564 2,502 21,155 5,415	21.184 27.421 22.41 25.319 24.826 23.6447 25.81	4 4 4 4 4 4 4	126 56 134 168 54 168 115	4,344.01 232.53 2,626.92 6,725.79 622.41 5,002.04 1,395.03
Stettler.....	1906 1907 1908 1909	76 57 44 42	23,726.1 1,402.7	29,439 23,605 17,113 8,729	21.088 22.71 25.192 23.6603	4 4 4 4	146 172 153 111	6,208.11 5,360.69 4,311.04 2,065.31
Stony Plain.....	1906 1907	64 35	6,122.8 2,201.7	7,029 2,756	21.46 22.053	4 4	64 48	1,508.46 607.79
Content.....	1907 1908 1908-9 1909 1909-10 1910	60 81 86 79 26 49	2,598.1 90,583 5,771 43,684	26,725 42,196 13,884 29,189 1,710 13,947	22.942 25.384 25.7 23.7925 27.852 24.33	4 3.581 4 4 4 4	174 188 196 168 40 124	6,131.29 10,711.03 3,568.42 6,944.80 476.27 3,394.39
Crossfield	1907	24	15,804.5	4,292	22.1645	4	69	951.30

TABLE I.—SUMMARY OF BUSINESS DONE AT GOVERNMENT CREAMERIES IN ALBERTA, 1906 TO MAY 1, 1911, INCLUSIVE. — Continued.

NAME OF STATION	Season	No. of Patrons	Inches of Cream Supplied	Lbs. of Cream Supplied	Lbs. of Butter manufactured	Average price realized at Creamery per lb.	Manufacturing Charge per lb.	Number of days in operation	Gross value of product
Rimbey	1907	39		17,908	5,938	Cents 22 8583	Cents 4	61	\$1,361 08
	1908	51		61,893	20,148	25 327	4	160	5,103 02
	1908-9	18		2,616	864	27 370	4	20	236 47
	1909	46		54,483	18,304	23 88	4	168	4,371 01
	1909-10	19		2,143	579	28 076	4	13	162 56
	1910	.			16,279	25 87	3½	162	4,211 30
Lamerton	1907	60		72,304 85	21,917	22 6593	4	152	4,966 26
	1908	49		52,355 9	19,303	25 321	4	152	4,877 69
	1909	49		55,113 4	21,022	23 5951	4	168	4,960.17
Spring Lake.	1907	24		23,045	7,328	23 797	4	94	1,791 51
	1908	52		95,797 5	32,480	25 177	3 792	188	8,177 61
	1908-9	39		29,671	9,610	24 935	4	196	2,396 26
	1909	69		108,675	37,310	23 7424	4	168	8,858 30
	1909-10	39		18,463	6,030	27 911	4	194	1,683 04
	1910	31		66,254	23,131	26 38	4	167	6,102 12
	1910-11				1,486	28 142	4		418 19
Vegreville . .	1908	29		18,098	5,085	23 967	4	45	1,218 75
Bonnie Glen .	1908	27		20,016	5,949	25 02	4	111	1,488 46
	1909	23		8,530	2,409	23 1225	4	33	559 43

Vermilion	1908	77	67,876.3	20,200	25,213	4	105	5,093.02
	1908-9	39	7,038	1,645	27,625	4	34	454.43
	1909	29	17,328.5	4,599	23,1433	4	90	1,004.36
Conjuring Creek	1908	56	75,189.4	22,915	25,228	4	160	5,781.03
	1908-9	47	10,297.5	2,696	23,544	4	48	634.76
	1909	76	85,581.9	27,230	23,7712	4	168	6,470.52
	1909-10	21	3,263.7	978	28,019	4	40	274.03
	1910			17,526	26,02	3½	167	4,561.66
Viking.	1909	62	47,687	17,498	24,4818	4	84	4,283.82
	1910			35,203	26,25	3½	171	9,243.68
	1910-11			5,770	28,241	3.23	.	1,629.55
Daysland.	1909	62	64,614.5	23,384	23,8406	4	132	5,574.89
	1909-10	29	6,346.8	2,177	27,7	4	67	603.03
	1910	55	73,298	27,330	26,2	4	167	7,162.20
	1910-11			7,649	28,682	4	.	2,193.96

Table II gives a summary of the foregoing by summer and winter seasons, respectively.

TABLE II.—TOTALS OF THE FOREGOING BY SEASONS.

SEASON	No. of Patrons	Inches of Cream Supplied	Lbs. of Cream Supplied	Lbs. of Butter manufactured	Average price realized at Creamery per lb.	Gross Value of Product
					cents	
1906	1,755	808,311 5	95,959	1,050,356	21 227	\$222,959 11
1906-7	526	96,843.2		111,774	27 784	31,053.10
1907	1,268	107,292 5	1,600,986.71	653,208	23 161	151,291.78
1907-8	387		258,533.9	74,062	30.149	22,329 38
1908	1,370		2,377,474 2	776,241	25 432	197,411 24
1908-9	970		653,996 8	197,545	25.708	50,786 43
1909	1,554		2,504,361 6	818,462	23.9282	195,843 77
1909-10	640			117,324	28.1415	33,172 40
1910				465,309	25.9106	120,564 74
1910-11				42,071	28.418	11,882 85
		1,012,447 2	7,491,312 21	4,306,352		\$1,037,294 80

Table III gives a summary of butter sales by the department for the summer season 1911. The announcement having been made that the department would undertake the marketing of creamery butter for any creamery in the province, along certain uniform lines, eight additional creameries wishing to take advantage of this service entered into an agreement with the department in that behalf. While a number of the creameries named shipped their entire butter output to the department for marketing, others who had contracted sales prior to entering into this arrangement, sent but a portion of their output and only during a part of the season. This circumstance explains to some extent the variations in the given selling price of the butter from the several creameries, though the difference in quality (grade) was also an important factor.

TABLE III.—SUMMARY OF BUTTER SALES, SUMMER SEASON 1911.

CREAMERY	Pounds of butter sold	Value at Creamery	Average price at creamery for Season
			cents
Trimble & Edwards	3,514	\$ 892 22	24 82
Trimble Creamery Co	6,343	1,606 70	24 76
Innisfail	27,037	6,976 27	25 23
Markerville	50,827	13,317 80	25 63
Red Deer	45,370	11,794 12	25 42
J. A. Brown	13,912	3,603 41	25 33
A. Barrett	16,056	3,936 44	23 95
T. A. Brereton	6,880	1,619 89	22 97
Ferry Bank	21,786	5,431 64	24 36
Wetaskiwin	40,050	10,181 02	24 85
Ryley	6,507	1,725 31	25 94
Viking	57,553	15,154 81	25 76
Daysland	36,831	9,504 75	25 23
Lakeview	17,764	4,318 77	23 74
Conjuring Creek	28,985	7,489 64	25 30
Rimbey	14,986	3,837 15	25 03
Spring Lake	19,267	4,961 70	25 18
Cardston	3,354	794 34	23 11
High River	2,250	593 27	25 80
Totals and average	419,272	105,344 13	25 125

V.—CREAM GRADING AT CREAMERIES.

The principle of grading and the payment of a premium for quality of cream and butter was adopted by the government creameries at the beginning of the season of 1910 and continued along the same lines in 1911. Some of the best privately operated creameries in the province took it up as well in 1911 and report excellent results. The adoption of the principle of paying a premium for quality has resulted in a very marked improvement in the cream supply, and as a consequence, an increased selling value of the butter made in the creameries concerned. The premium principle is sound in that the patron is given a chance to participate in the increased value which his skill and care in handling the raw material gives to the finished product of the creamery. It is expected that the grading and premium system will soon be adopted by practically all the creameries in the province; by the majority because it is good business and by the others because their quality patrons will demand it or transfer their patronage to a more appreciative market.

Having carried on the grading and quality basis of payment of butter for two full seasons it is interesting to note the progress made in the matter of improvement of the quality from year to year. The improvement in the quality of the butter has been brought about by a corresponding improvement in the quality of the cream delivered by the patrons.

The following table presents a comparative statement of the first and second grade butter in the production of all creameries, of which we have complete records for three full seasons. The butter output of several other creameries was included in the work during a portion of that period but it was considered advisable to show only the record of these creameries which had operated without change of management for three successive seasons.

TABLE IV.—PROVINCIAL GOVERNMENT CREAMERIES, ALBERTA.

GRADING OF BUTTER.

Creamery Serial No. (1)	SUMMER 1909		SUMMER 1910		SUMMER 1911	
	% Firsts (2)	% Seconds (3)	% Firsts (4)	% Seconds (5)	% Firsts (6)	% Seconds (7)
1. N	33.6	66.4	98.26	1.74	100	
2. D	90.2	9.8	*30.07	6.63	*57.43	3.64
3. E	*25.80	9.9	93.37	8.21	96.36	
4. V	90.1		*46.06		*38.71	6.04
	*12.27		91.79		93.96	
	57.9	42.1	*36.32		*39.75	
			x87.95	12.05	99.81	.19
			*13.44		*35.43	
5. C	77.7	22.3	84.43	15.57	85.88	14.12
	*7.25		*18.38		*23.41	
6. S	55.6	44.4	92.45	7.54	86.43	13.57
			*22.38		*21.19	
7. Y	84.9	16.1	96.97	3.03	82.81	17.19
	*7.68		*28.08		*27.87	
8. W	55.3	44.7	83.93	16.07	84.00	16.00
	*3.23		*48.21		*32.97	
9. L	30.3	69.7	x84.10	15.90	76.78	23.22
			*10.54		*24.19	
10. K	48.1	51.9	x74.89	25.11	x53.52	46.48
			*12.90		*15.02	
11. T	38.6	61.4	x30.04	69.96	26.69	73.31
					*2.90	
Average	72.39	27.61	84.53	15.47	85.67	14.33
	*9.13		*26.21		*32.87	
Churnings Scored	1372		954		1002	

It will be noted that the percentage of first grade butter made in these creameries increased under the premium system from 72.39 for the season of 1909 to 84.53 for 1910 and 85.67 for 1911, with a corresponding decrease of "seconds." Not only that, the percentage of extras, that is, high scoring "firsts" increased from 9.13 in 1909 to 26.21 in 1910 and 32.87 in 1911.

The letter x indicates the creameries which did not pay a premium for first grade cream during the season for which the figures are given.

Reference to the table will show the movement of the grades in the case of individual creameries from season to season. The figures preceded by a star (*) indicate the percentage of extras, that is, high scoring "firsts."

The grading of the cream furnished by the patrons and payment according to its quality and condition brings home repeatedly and in a practical way the lesson that it pays to handle dairy products with intelligent care. If we are to develop our dairy industry along profitable lines we must produce quality goods so that the ultimate market, the consumer, may feel that he is getting value for his money when he buys our products. While by reason of the specialization of modern manufacturing and marketing methods the dairy farmer does not often get into personal contact with the consumer of his products and while he may think that the identity of his products become lost in the process of marketing he will certainly find that in attending to his own share of the production process

it will be good business on his part to at least follow them in imagination to their ultimate market—the consumer, to anticipate his needs and preferences and to do all he can towards establishing the point of contact that will result in the coveted “repeat orders.” the joy of every good business man’s heart.

It was the writer’s privilege to attend and address the Dominion Dairy Conference at Ottawa in December on the subject of grading and quality basis payment of cream and butter. A unanimous resolution was adopted by the conference recommending creameries, especially those following the cream gathering plan, to adopt a system of grading and premium for quality payment.

VI.—CONVENTION OF CREAMERY DELEGATES AT INNISFAIL.

Following are extracts of letters mailed in December, 1910, by order of the Honourable the Minister of Agriculture to the secretaries of the creamery associations whose creameries had been operated by the government during 1910, the secretaries of associations and to proprietors who had individually operated creameries in the province during the year inviting them to attend a convention of creamery delegates at Innisfail on January 4th, 1911:

“The special attention of the convention will be invited to the consideration of the following matters, viz.:

“(1) Review of the past season’s business of the Government Creameries, including (a) the marketing of the butter and the prices realized; (b) the application of the grading system and premium basis payment for butter and cream, and (c) the working out of the new provisions contained in this year’s working agreement whereby the associations assumed more or less direct control of the local management of the business of the creameries. The delegates will be given ample opportunity to discuss these various matters from their association’s point of view, leading up to the consideration of—

“(2) Future arrangement respecting the business of the creameries.

“Several associations did not renew the agreement with the department this year and have therefore conducted the whole business themselves, including the selling of the butter output, under the supervision of their respective boards of directors. These associations will also be invited to send delegates and to present a statement of this season’s business for the information of the convention.”

“Generally, the business of the convention will include reports and discussions on the condition of dairying in the province, on the past season’s operations of the government creameries, markets and marketing of butter, the results of the season’s experience in the grading of cream and butter and the payment of a premium on the basis of grade, the new provincial dairy legislation and other matters which may have a bearing upon the development of the dairy industry of our province.”

The following creameries, acting on the invitation, were represented as follows on the opening day of the convention:

The Innisfail Association	{ Joseph Smith, President. Isaac Bateman, Director E. J. Fream, Secretary-Treasurer. L. M. McLean, Buttermaker.
The Lakeview Association.	{ Wm. M. Graham, President. Donald Cameron, Secretary-Treasurer.
The Wetaskiwin Association	{ Jas. Bradley, Secretary-Treasurer. B. Bjornson, President.
The Markerville Association.	{ O. Sigurdson, Director. D. Morkeberg, Buttermaker and Secretary.
The Conjuring Creek Association.	{ M. B. Latam, Buttermaker.
The Ferry Bank Association . . .	{ L. Doran, Director. F. Symonds, Vice-President.
The Rimbey Association	{ John H. Beeley, Secretary. A. A. Munro, Buttermaker.
The Content Association	{ Amos Wilton, President.
The Blackfalds Association.	{ G. L. Gregson, Secretary. H. A. Gracey, Buttermaker.

The Red Deer Association	{ James Comer, President. E. Carswell, Secretary. M. L. Campbell, Buttermaker.
The Viking Association	{ Fred Thoresen, Director. James Lawes, Director. Jas. C. Barker, Secretary. J. J. Skalitzky, Buttermaker.
The Earlville Association	{ P. R. Stewart, President. W. W. Batson, Secretary.
The Spring Lake Association	{ Frank Block, President. Fred McDonald, Secretary.
The Daysland Creamery Association	. W. W. MacGregor, Buttermaker.
The Beaver Lake Association.	{ B. M. Bendikson, President. J. J. Ormsen, Buttermaker.
The White Swan Creamery, Bowden	. L. S. Leach, Buttermaker.
The Pincher Creek Creamery	. W. R. McKerricker, Proprietor.
The Bentley Creamery	. J. F. Millar, Proprietor.
The Initial Creamery, Harmattan	. O. O. Taylor, Proprietor.
The Pine Lake Creamery	{ C. A. Trimble, Proprietor. F. T. Edwards, Proprietor.
The Vegreville Creamery	. O. K. Grove, Proprietor.
The Alberta Central, Edmonton	. W. B. Podmore, Proprietor.
The Calgary Central Creamery	. P. Pallesen, Proprietor.
The Golden Rose Creamery, Camrose.	. J. Harris, Proprietor.

In addition to the Honourable Duncan Marshall, Minister of Agriculture, the following departmental officials were in attendance: W. F. Stevens, Live Stock Commissioner; H. S. Pearson and Geo. W. Scott, Provincial Dairy Instructors; C. Marker, Dairy Commissioner, and F. W. Underwood, Convention Secretary.

Present were also His Worship the Mayor of Innisfail, Mr. G. W. West; Prof. W. J. Elliott, Superintendent of the C.P.R. Demonstration Farm, Strathmore, who had kindly consented to give an address on the milking machine; J. Bowers, President of the U.F.A.; W. R. Wilson, Manager of the Union Bank, Innisfail; F. S. Jacobs, Editor-in-chief of "The Farm and Ranch Review," and others.

The first session of the convention was called to order at 2.30 p.m. by the dairy commissioner who outlined the programme and called on His Worship Mayor West to address the delegates.

Mayor West in a graceful speech cordially welcomed the convention to Innisfail. In so doing he championed the Innisfail district as one of the pioneer dairy sections of the province and pointed to the general prosperity that had resulted from mixed farming operations. He commended the work that is being done to promote dairying and felt assured that the deliberations of the convention would prove both interesting to those in attendance and beneficial to the industry.

Mr. E. Carswell, who was unanimously elected chairman, addressed the convention briefly and hoped that its labours would result in a better mutual understanding among the creameries and their patrons, in more unity and co-operation. He was pleased to see the Minister of Agriculture present and asked him to address the meeting.

Hon. Duncan Marshall welcomed the delegates who had accepted the invitation of the department. He considered that these annual gatherings of creamery delegates and managers had been a very important factor in the development of an organized dairy industry of the province. He was particularly pleased to see so many privately operated creameries represented and assured them that, while it was erroneously supposed by some that the department had made special pets of the so-called government creameries, because it conducted

the commercial departments of their work, the educational services of the Dairy Commissioner's Branch had always been at their disposal to the fullest extent.

In past years the department had undertaken the local management of a number of creameries as an educational measure. It had appeared necessary and advisable for the department to take up this work, but he considered that this necessity and advisability no longer existed and would like to see the associations assume the local management of their creameries and leave the department to enlarge its scope of work in other directions. For instance, while the department had in the past through its Dairy Commissioner, attended to the marketing of the butter output of the government operated creameries exclusively, he was prepared to place this service at the disposal of the private creameries as well and advice to that effect would be sent to every creamery operated in the province before the next season opens.

He believed that the marketing service of the department had been of benefit, not only to the creameries directly concerned but also to those who had not been able to avail themselves of it. The season's educational scoring competition and the grading system connected with the marketing service had enabled us to cater to special outside markets very largely. The marketing service and, through it, the special markets will now be extended to any creamery in the province. He said that the aim of the department is to help bring Alberta dairy products to so high a standard of excellence that they will create a continually extending market.

Mr. Marshall next referred to "The Dairymen's Act" in its amended form and showed how its provisions were calculated to promote the square deal not only as between the creameries and cheese factories and their patrons, but also as between the factories themselves and between the producers and consumers. The Act requires that our dairy products be produced under sanitary conditions; it calls for a fair test of the patrons cream and a business-like statement with every payment. These are all very important matters and essential to the building up of satisfactory and permanent business relations.

The Minister referred also to the establishment of provincial demonstration farms which would be conducted on the principle of mixed farming and therefore capable of rendering good service to the dairymen of the province. These farms would demonstrate what profits could be made from raising hogs and cattle, producing grain, milk and butter and other farm products. The farms would also become centres for the distribution of pure, clean seed sold at a reasonable price to the farmer.

It was the intention to place on some of these farms cows of the dual purpose type. He said that we should aim to produce cattle for the market as well as for the dairy.

C. Marker, Dairy Commissioner, was next called upon to address the convention. He presented a statement of the past season's business of the government creameries. However, as the statistical and general details are published in the department's report for 1910 it is not necessary to repeat or enlarge upon them here.

Referring to the dairy industry on general lines he thought that the time had now come when we should engage more largely in winter dairying. He believed the creameries were ready to do their share in making winter dairying profitable by operating their creameries so long as a reasonable cream supply was forthcoming. Certainly the markets as a general thing stand ready to encourage

winter dairying through paying a high price for our dairy products. Winter dairying demands suitable feed and care of the milking stock it is true, but there is no reason why these could not be provided by the many dairymen as they are now being provided by the comparatively few. Some of the latter are with us and when the subject comes up for discussion we shall learn more about it from them.

Following the foregoing addresses many of the delegates took part in a helpful, general discussion on creamery management, dairy markets, prices, cream grading, etc.

Before the afternoon session was adjourned a resolution committee of the following delegates was appointed, viz.: D. Morkeberg, Jas. C. Barker, Donald Cameron, E. Carswell, B. K. Grove, Joseph Smith, P. Pallesen, E. J. Fream and J. Harris.

EVENING SESSION.

Mr. W. F. Stevens, Live Stock Commissioner, addressed the convention on the subject of "FEED and CARE OF DAIRY STOCK."

When speaking of dairy feeds, it is my custom to mention first those things which can be supplied for nothing. By these I mean sunlight and fresh air. I have no apologies to make for giving precedence to these because it is my observation that these are the ones that are most neglected on the average dairy farm and also because without these the other foods can not give their best results.

What constitutes the proper amount of sunlight for a matured animal is still a matter of more or less dispute. Certain it is that it must be sufficient to destroy those bacteria which always accumulate in places where animals are confined. The Board of Health at Edmonton has fixed four square feet of glass for each matured animal as the required amount. While many may think that this is more than is necessary, and I believe myself it is certainly adequate, yet if only half that amount were supplied conditions on our dairy farms would be far superior to what they now are.

VENTILATION.

As regards the manner of admitting fresh air into the stables and carrying off the foul air without having the same accompanied with a draft, which operations are usually included under the term ventilation, several systems are in vogue. Many of these are elaborate and expensive. I find that it is useless to recommend anything elaborate and expensive to the average farmer, and for that reason I intend speaking only of such systems that may be installed by the farmer himself and without the expenditure of much money.

It is my conviction that there is no better method of admitting fresh air into the stable without occasioning draft than by means of ordinary cheese cloth. The system that must be adopted will depend very much upon the arrangement of each individual stable, but two things should be kept carefully in mind, one is that the fresh air must be admitted at some point near the head of the animal in order that it may be inhaled without first having been vitiated with disagreeable odors or bacteria, and the other point to be observed is that the outlet for the foul air should be immediately over or near the point where the droppings accumulate.

DRINKING WATER.

One kind of food to which too little attention is given is water. When looking at milk we find it is a liquid; upon analysis it is found to consist of about eighty-five per cent. of water, consequently the food supply must also consist very largely of this commodity. The most common methods of supplying water to the dairy animals of Alberta during the winter months are not what might be called strictly up-to-date. The one most commonly in vogue is that of cutting a hole in the ice on some lake, pool or stream and compelling the animals to drink from it water at a temperature little above the freezing point. This is bad enough for beef animals which are being fed heavily upon grain, but it is not good enough for the delicate organization of a dairy cow, and I am convinced that the shock occasioned by standing out in the cold and imbibing ice-water is the direct cause of the poor success attending the efforts of many of our farmers at winter dairying.

An improvement has been made on many farms by pumping the water fresh from the well while the animals are drinking. This, of course, is far superior to the old method but it is not the best that can be devised and I have no hesitancy at all in saying that any man who is seriously in the dairy business should make it a point to temper the water by some artificial means during the winter months, for his dairy cows, particularly those which are giving milk.

HEATED WATER TROUGH.

The farmer who is living in a bush country naturally desires to utilize those commodities to which he has the easiest access and which cost him the least money and effort. Consequently he would require a heater in which rough wood could be burned to advantage. A fire box suitable for this may be easily constructed by any person of ordinary skill by using either stones or brick and making a fire box from twelve to eighteen inches high and as long and wide as it is desired, to make the watering trough. This fire box will also serve as a support or foundation for the watering trough. Steel watering troughs may be secured at a reasonable price but a trough may also be constructed cheaply by using a heavy piece of galvanized iron for the bottom of the trough and ordinary plank for the sides which should be of such depth as it is thought necessary to build it.

TANK HEATERS.

Where wood cannot be easily obtained and where coal has to be used, the ordinary tank heater I think will be found the most convenient. For a tank holding more than ten barrels of water I would suggest that a somewhat larger heater be secured than is usually offered for sale here. It should be borne in mind that most of the tank heaters which are now on the market were purchased in the United States where the temperatures do not get as low as they do here at times, and it stands to reason that a larger body of fire is necessary in this latitude than in countries farther south, to offset the greater degree of cold. The average heater for sale at present is from 15 to 16 inches in diameter. I think that a heater of from 20 to 24 inches in diameter would be preferable and that there would then be no difficulty in keeping the water of even a 25-barrel tank at a temperature of 90 degrees Fahrenheit during the coldest weather.

I sometimes hear the complaint that it costs too much to buy coal for such purposes. In reply to this objection I can only say that before a cow can combine this water with the solid foods supplied her and convert the same into milk, the temperature of the water will have to be raised to that of her body, and if this is not done artificially by means of coal or wood she will do it herself by those natural processes by which she is enabled to convert hay and grain into heat instead of flesh or milk, and it is well to remember that a cow is not secreting milk during the time that she is warming water.

SUCCULENT FOOD.

Another means of supplying water to dairy animals is through the agency of succulent feeds. There are three classes of these in use on the dairy farms of Canada, namely, the various pasture grasses for summer use and ensilage and roots for the winter months. In those districts where there is still a considerable area of unbroken and unenclosed land, the problem of securing summer pasturage is not yet a serious one but the farmer or dairymen who finds himself compelled to graze his animals inside his own fence, soon realizes that it is necessary to get something more productive than our native grasses before he can secure profitable returns from land devoted to pasture. The grass in most common use is timothy. The principal reason for this is that a good stand can be secured at small expense and that it can be sown in a nurse crop. But timothy is not a good pasture grass for this country. It requires moisture earlier in the spring than our rainy season opens and it needs more of it than falls in most parts of Alberta.

KENTUCKY BLUE GRASS.

Although it falls short of being ideal for the purpose of pasture, farmers and dairymen of the province need not despair on that account, because the best of all pasture grasses for North America, namely, Kentucky blue grass, does well in nearly all parts of the bushy portions of this country. I have seen it as far east as Lloydminster and as far west as Lake Wabamun. I have seen it as far north as the Pembina and as far south as Olds. For more than a year I was in doubt as to its identity because I found the foliage more dense, the colour a richer green and the seed larger and heavier than I had ever seen them in Eastern Canada or the United States. I finally submitted a number of samples to our botanist and chief weed

inspector, Mr. Lewis, for identification and have been advised by him that it is the Kentucky blue grass.

Kentucky blue grass does not lend itself to a rotation of crops but it is ideal for a permanent pasture. As it is slow in establishing itself it should be sown in connection with timothy, at the rate of eight or ten pounds of blue grass to three pounds of timothy seed per acre. It may be sown in a nurse crop. The prime virtue of blue grass is that it imparts quality to everything produced from it. The best horses in North America are grown where the blue grass thrives, and there is no better milk, butter or cheese than that obtained from cows pasturing on this grass.

BROME GRASS.

It is doubtful if blue grass would be found profitable in what we usually speak of as the short grass sections of the province. For those districts I know of nothing better than brome grass where irrigation is not practiced. I know it is somewhat dangerous to mention even the name of brome grass, yet I have grown it for ten years and have no intention or desire to get rid of it because during that time there have been at least two seasons when I would have been compelled either to reduce my stock or buy feed during the summer months had it not been for my brome grass pasture and I am able to grow more stock every year than I could do without it.

The brome hay is far superior to timothy for dairy cows and I am inclined to think it is superior to "prairie wool" as well. Owing to its habit of spreading, I would not advise sowing it near where there are either fruit or shade trees nor where there is shrubbery of any kind. It should not be sown in a nurse crop, but on a carefully prepared summer fallow or on land that was planted to vegetables the year before, and it should not be pastured during the first year. It requires almost as much care in starting as does alfalfa.

CORN VS. ROOTS.

The principal crop used for ensilage purposes is Indian corn. As the growing of Indian corn has not yet been placed upon a commercial basis in Alberta and as the corn is ready for harvest here at almost the same time as our ordinary grain crop, there is danger that the man who is farming as well as dairying will find his fall work crowded into too short a space of time should he attempt to grow ensilage corn. This is particularly true of those sections which are subject to early autumn rains and in which the work of harvesting is sometimes seriously delayed. For these districts I am urging the growing of root crops rather than that of ensilage corn. There are several reasons for this. Our root crops will stand more severe weather than will Indian corn, they make their best growth after the Indian corn is supposed to have been harvested. The other farm crops may be harvested, stacked and threshed, and a considerable amount of fall ploughing can be done before it is necessary to begin to harvest the root crop.

We hear a great many objections raised to the growing of root crops in Alberta. One man says that they consist of 90 per cent. of water; another man says they only contain about one-half the amount of dry matter that ensilage does, while a third man complains that there is too much work connected with growing and harvesting them. As regards to the question of water. I have only to answer in the language of a certain Ontario Institute speaker who in reply to a similar objection stated "that it was darn good water."

As regards the question of dry matter, I may say that I am satisfied that the mere dry matter content of any feed is not the true measure of its feeding value. That the feeding value of root crops to an animal which is being fed largely upon hay and grain can no more be estimated by the amount of dry matter which the roots contain than can the dry matter of an apple be made the true measure of its feeding value to a labouring man who has been subsisting largely upon boiled potatoes and pork and beans.

As regard the labour connected with growing root crops, I am aware that this is considerable but the size of the yield that may be obtained from an acre of land in Alberta and the feeding value of the crop itself will amply repay all the labour that it may be found necessary to bestow upon them. I may say also that a great deal more hand work is being done by most farmers than is absolutely necessary. Under ordinary methods one of the most tedious parts of growing root crops is that of sowing the seed and yet this can be done with machinery.

Although I have found men in Alberta who have made a success of growing sugar beets and mangels, personally I have not been very successful in growing roots of this kind and what I have to say regarding root crops will apply especially to turnips and swedes. It has been my practice to sow these drills in about 36 inches apart in order that they may be cultivated with a horse cultivator. I close up the drill holes of my four horse drill leaving an opening for each sixth drill thereby spacing the rows 36 inches apart. I then take clean weed seeds or shriveled grain of some

kind and put it in an oven and parch it in order that it will not grow. I then let it cool and mix the turnip or swede seed in this roasted grain or weed seed and drill it as I have indicated. The cultivating is done with a horse cultivator and the only time the hoe is used is in thinning, and if a little care is exercised in the sowing, the labour of thinning is not very great.

The old method of harvesting, I am aware, is labourious but it can be very greatly simplified. One of the best methods which I have seen is that of going over the patch with the hoe and cutting off the tops, then if the patch be not too wide going crossways with an ordinary two-horse rake and raking off the tops, then following with an ordinary harrow which has been weighted by means of a pole or rail and by lapping the harrow one half of its width the turnips will be turned out of the ground and nearly all of the dirt knocked off of them. They can then be readily picked up with an ordinary manure fork and thrown into a wagon and from there into the root cellar.

PROTEIN FEEDS.

The ordinary feeds grown in Alberta contain an abundance of carbohydrates or fat and sugar producing substances, therefore I need not dwell upon the necessity of supplying them but will draw your attention to the necessity of supplying proteins, which are generally deficient in the feeds supplied to our dairy cows. Bran is the substance which is used as the standard by which other protein feeds are measured but it has now reached a price in Alberta where it is very closely approaching the limit of economical feeding. At Edmonton we are paying \$22.00 a ton for bran at the present time. This can be paid only under exceptional circumstances and it cannot therefore be made a general and staple food on a dairy farm. Some kind of substitute is therefore necessary. What that shall be will depend very largely upon one's environment.

ALFALFA AND WHITE CLOVER.

In those parts of the province where alfalfa can be successfully grown the difficulty is practically solved as alfalfa contains almost the same amount of protein as does bran. In those parts of the province where alfalfa growing has not yet proved a success, the principal substitute has been green feed or oats cut in the green state. These provide a very good rough feed but they are by no means the best obtainable. There is, however, another plant that can be successfully grown in nearly all parts of Alberta and to which I desire to direct your attention. We who have lived in the East have become accustomed to holding it in more or less of contempt yet I think it is well worthy of being experimented with in Alberta particularly in the bushy country and more especially in those districts where alfalfa growing has not yet been made a success. I refer to the white clover plant. We have all noticed it growing by the roadsides and along the railway tracks and we observe that it makes a much larger growth here than in the East. While I have not had experience in growing it for feeding or crop purposes, yet judging from the density of its growth and the height it attains, I have no doubt at all but that a single cutting of at least a ton and a half per acre can be grown in most parts of the central portion of Alberta. This I know is small when compared with the returns reported from alfalfa but the care and cost involved in growing it are also very much less. As to its feeding value I may say that I was somewhat surprised to notice a few days ago that the percentage of protein of the white clover is slightly greater than that of alfalfa and only a very little less than that of wheat bran.

There is another point which stands to the credit of the white clover and that is that it enters nicely into a rotation as it may be sown in a nurse crop and gives a good crop the following year. The seed is somewhat expensive at present but if it were more extensively sown there would be more people growing the seed and in time it would be obtained at a much less cost than at present. In the East it was our custom to consider it a nuisance and to separate it from the alsike and red clover seed as much as possible and throw it away. As I said before I have had no experience in growing white clover for a hay crop, but from what I know of its habits or at least from what I have seen of it in this province and from what we are told by scientists regarding its protein content, I think it is well worth experimenting with by the dairyman of Alberta particularly by those who have not as yet been successful in growing that best of all legumes—alfalfa.

FIELD PEAS.

Another legume that is very popular in the East and which can be successfully grown here is the ordinary white field pea. Sown with oats and cut green it yields a large amount of fodder, and when properly cured it is much relished by stock of all kinds. In some sections of the province, the weather is somewhat uncertain

during the haying season, and as it is difficult to cock pea and oat hay so as to make it turn water, some method other than that usually followed in curing hay must be adopted.

We often hear men say that by placing alternate layers of green clover with dry straw we can make good hay out of both. I have had a little personal experience along that line and I can say that while I failed to make clover hay out of straw I did succeed in getting first class hay out of the green clover, and I feel certain that the same can be done with pea and oat fodder. It is at least worth giving a trial in a small way, particularly by those who are engaged in winter dairying and find it necessary to buy most of their nitrogenous feeds.

To recapitulate briefly the things with which the dairyman, particularly the man who is engaged in winter dairying, must provide his animals are sunlight, fresh air, pure water, succulent feeds and protein. The carbohydrates are sufficiently abundant in our native feeds for the use of dairy animals and for that reason they need not be especially emphasized.

An animated discussion followed Mr. Stevens' address; Messrs. Pearson and Scott, dairy instructors, each spoke at some length relative to their observations through the country generally and gave particulars as to methods followed by some of the breeders who have cows entered in the Record of Performance Tests. Cows that make good in those tests have to be well handled.

Mr. P. Pallesen of Calgary also gave some interesting information as to the methods followed on the Pallesen dairy farm near Calgary. Pallesen Bros. have made a great success of winter dairying.

COLD STORAGE SERVICE.

At the forenoon session on January 5th the Dairy Commissioner explained the nature of the cold storage service offered by the department to the creameries and the conditions upon which butter would be received and stored. A letter covering this point was mailed to all interested parties and read as follows:

Our short term rate is 25 cents per 100 pounds of butter per month, or portion thereof, payable monthly, and applies in cases when only a portion of the butter output of a creamery is handled or when storage facilities are required only for a part of the season.

Our season's rate applies to creameries who wish to make use of the cold storage for the handling of their entire butter output for the whole season, and is the same as charged to the butter from the creameries operated by the government in the province. The exact rate can not be determined until the close of the season but it will be in the neighbourhood of one-half cent per pound of butter. When that rate applies an advance charge of 25 cents per 100 pounds of butter will be made on all butter shipped out of storage each month and the balance will be payable when the rate has been ascertained at the close of the season.

Following is the service we offer, viz.:

(1) To accept delivery at the Calgary railway station of any creamery butter you may ship us for the purpose of storage, freight charges paid.

(2) To issue, upon demand, official negotiable warehouse receipts covering any or all of the butter received.

(3) To place and keep the butter in cold storage covered by insurance to the extent of 20 cents per pound.

(4) To deliver on your shipping instructions at the railway station any butter not covered by outstanding warehouse receipts. Outgoing railway freight charges to be arranged for by you or consignee.

We are prepared to receive butter at any time upon the above mentioned conditions.

THE DAIRYMEN'S ACT.

After that he took up the discussion of the new sections of "The Dairymen's Act" with a view to having them generally understood by creamery operators.

Aside from the sanitary provisions the present Act establishes in sections 31 and 32 (office consolidation) standards for the test samples of milk and cream which is bought on the basis of its butter fat contents as determined by the Babcock test. The standard sample of milk is 17.6 cubic centimetres, and the standard sample of cream is 18 grammes. Hence, all creameries who have not yet done so will find it necessary to provide themselves with a delicate balance for weighing the samples of cream for the Babcock tester.

Another provision, section 33, requires composite samples of milk and cream made up of units which are proportionate to the quantity of milk and cream from which they are taken.

Further, Sections 35 and 36 require that certain specified information is to be given upon the written statements which accompany the payments to patrons for milk or cream furnished to cheese factories and creameries.

It was shown that these and other provisions would go a long way towards eliminating that distrust and suspicion which is but too often in evidence between the patrons and the creameries. Confidence is the basis of all trade and any agency which will help to establish more confidence in our dairy trade, generally, should be welcomed by all parties concerned.

The question of cream grading was also discussed and is dealt with at some length elsewhere in this report. The principle of grading and paying a premium for quality was warmly endorsed by all present who had adopted it in their creamery operations.

The afternoon session was opened with an address by Professor W. H. Elliott on the subject of the milking machine. The speaker exhibited one of the milkers and explained its mechanism to an interested audience. He readily answered numerous questions as to the economics of machine milking. Following is Professor Elliott's address:

THE B-L-K MILKING MACHINE.

The milking machine in use at the demonstration farm of the Canadian Pacific Railway at Strathmore, is one perfected by the D. H. Burrell Company, of Little Falls, New York. It is run on the vacuum system and appears to give as near perfect results as possible. We used this milking machine for three years in Montana and are well satisfied with it. In fact we are thoroughly convinced that the machine is the thing that is going to solve the great labour and drudgery problem of the dairy business. Once in a while we may find a cow that does not take kindly to the machine, yet nine out of every ten will milk fairly well with it. In comparing the milking machine with hand milking, we might say that if it were possible to get men who were excellent milkers then perhaps there might not be very much gained in the use of the machine, but as conditions are today and as we have to do with a great variety of inefficient help, the milking machine is certainly a boon to the dairymen. It is always ready for business and costs very little for upkeep. In the three years use at the Montana Agricultural College, the total expense for upkeep was less than \$1.25. In fact, there seems to be very little about the machine that is liable to get out of order.

Notwithstanding the fact that the milking machine will do efficient work, the main point is to have a man who will properly handle the machine. After all, more depends upon the man than upon the machine. The milking machine will do the work if you will get the proper man to handle it. We would strongly recommend that in every case where it is thought desirable to instal the machine, that one of the best milkers should be sent to some place where a milking machine is in use so that he may have about two weeks' experience in handling the machine. A man who is successful as a hand milker will likely be efficient with the machine as he is apt to be one who studies the cows, knows the condition of each animal and knows exactly how each cow milks in each quarter. He must study the cow. He must bear all of these things in mind very clearly and must handle the machine just as carefully as he would handle the cow under a system of hand milking. The two great things in favour of the milking machine are cleanliness and labour saved.

Our man in the barn at the present time milks fifty cows in thirty-eight minutes, and with respect to cleanliness, it will be understood, of course, that everything about the pail and teat cups is air tight, consequently no dust or dirt of any description can gain access to the milk. One of the main points is to keep the rubber tubing thoroughly cleaned. It is a comparatively simple matter to do this just before the milking operation stops. Get two pails of water, one lukewarm, with Wyandotte powder in it, and the other as hot as possible. With an extra stop cock in the passage, simply attach each pail to the power. Immerse the teat cups in the solution and then in the scalding water, thus these fluids are surged through the rubber and aid very materially in keeping it clean. Between each milking operation, the tubes are immersed in a carbolized solution of lime water, or still again, in a salt brine solution. This latter, we think, the simplest and perhaps as efficient as any.

We find the cows take very kindly to the machine, and, in fact, if we are able to judge, seem to prefer it to hand milking. It would not pay to instal the machine with less than 25 cows, but with that number up to the very largest dairies, the milking machine comes to be very profitable. In our barn at the demonstration farm where it took six men last winter to care for the dairy stock, this winter we intend to do the work with three men, thus it will be clearly seen that in the labour saved during the coming winter we will practically pay for the complete installation of the milking machine. For a barn of 20 to 25 cows, three to four hundred dollars will instal the milking machine. In our barn an equipment to milk 100 cows cost us between eight and nine hundred dollars and, as I have already said, we will actually save the cost of this machine in one year's time with the elimination of practically half of our dairy barn help. After all is said and done, the main point is centered in the man who will operate the machine and a man of good ordinary common sense ought to be able to handle the machine in a short time.

For those who may be especially interested in the use of the machine, we might further add that our dairy barn is open at all times and we will indeed be glad to have any interested party come and spend a week with us to study the machine and acquaint himself fully with it. There is nothing complicated about it and a farmer would easily get the run of the machine in a week's time.

To further show our opinion of the milking machine, we might say that it is our intention to increase the dairy herd here until we are milking 200 cows. We hope to do this entirely by the machine and look for favourable results.

We will be glad to answer any questions that you may have to ask.

RESOLUTIONS.

The resolution committee submitted the following report, which was unanimously adopted:

1. Having heard with interest the address of the Honourable Minister of Agriculture in regard to the management of the so-called government creameries, we, the delegates here assembled, do wish to endorse his statement that each creamery association should pay its own way as we believe that an industry which has to receive a bonus of any kind is not in a healthy condition. We would point out, however, that when these smaller creameries were established, the patrons and shareholders were given to understand that the government would not charge more than four cents per pound for manufacturing butter exclusive of cream hauling, and if this agreement is suddenly terminated, it will mean a great hardship upon these patrons and shareholders, and we would further recommend that the provision in regard to these small creameries paying everything at the present time be not enforced, but that every case be taken upon its own merits, and an agreement made to cover each creamery individually, after all conditions have been investigated. We would recommend, however, that in regard to the establishment of new creameries, that different arrangements be entered into by the government, and that the patrons and shareholders of these new creameries be informed that if a creamery is established, such creamery must pay its own way from the commencement.

2. We hereby endorse the statement of the Honourable Minister of Agriculture, that the cold storage facilities at Calgary shall be open to all creameries, whether under government or private operation. We would recommend, however, that under no consideration should these facilities be granted for the storing of dairy butter, or for any produce except that manufactured by creameries or cheese factories authorized under the Dairymen's Act.

3. This convention wishes to further endorse the plan of the grading of butter and the payment for this butter upon a quality basis, and we recommend that the plan of grading be extended as far as possible, working towards the end, that, at some future time, all butter exported from Alberta shall be graded according to some recognized standard.

4. Having noticed that it is the intention of the government to establish five demonstration farms in the province during the present year, and believing it is the intention of the government that these farms shall be for the purpose of demonstrating the best methods of mixed farming, we do strongly recommend that arrangements be made by the government to bring over a small herd of the Danish red cattle and place them upon one of these farms, so that the value of this breed for dairy purposes, and their adaptability to the climatic conditions of this province can be fully demonstrated.

5. Whereas it is a well-known fact that a large quantity of dairy butter sold over the counters in the stores is under weight, and the Dominion laws governing same do not seem to be well known, we therefore strongly recommend to the Honourable the Minister of Inland Revenue, that steps be taken to make this Act better known and to have the provisions of same more rigidly enforced.

6. That this convention requests the Minister of Agriculture to arrange for the publication of the proceedings of this convention, together with the charts shown, and that a copy of the proceedings be forwarded to the patrons of all creameries in Alberta.

7. This convention recommends that the regulations applying to entire animals running at large be so amended, that bulls will not be permitted to run at large in acknowledged dairy districts.

8. Whereas the present system of allotting shares has resulted in shares being issued to former patrons who have left the district, and these shares are now being carried on the books of the associations, thereby causing a large amount of unnecessary labour, we do hereby request the Minister of Agriculture to bring in an amendment to the Dairymen's Act giving associations power to cancel any shares whether fully paid up or otherwise, in the event of the said shareholders not registering their proper address within five years after the allotting of said shares, and after advertising the names of said absentee shareholders at least three times in a local newspaper and once in the official Gazette of the province.

9. That this convention place on record our appreciation of the splendid services rendered to the dairy industry of the province by the Honourable Duncan Marshall, Minister of Agriculture, and his efficient staff, more especially Mr. C. Marker, Dairy Commissioner, and we wish specially to emphasize the work done in raising the standard of Alberta's butter, providing efficient cold storage facilities, and for the marked step in advance by the legislation relating to creameries and cheese factories which was recently introduced into the legislature by the minister, and which is now law.

A complimentary banquet was given by the citizens of Innisfail at the Alberta Hotel in honour of the visiting delegates to the convention. The entertainment and hospitality was all that could be desired. Several excellent speeches were made, though to record them here would be foreign to the purpose of this report. One event took place, however, which was the culminating point of a year's faithful labour and effort on the part of the buttermakers who had participated in the season's Educational Butter Scoring Contest, namely: The announcement of the results of the contest and the presentation of the prizes by the Minister of Agriculture. The nature of the contest was described in last year's report of the department and the winners of the coveted honours for the season of 1910 were:

Trophy and Gold Medal, D. Morkeberg, Markerville.

Silver Medals: J. J. Skalitzy, Viking; E. W. Parker, Ferry Bank; A. A. Munro, Rimbey, and M. L. Campbell, Red Deer.

The concluding session, held in the forenoon of the sixth, was devoted chiefly to a general review of the addresses and discussions of the former sessions so as to bring the main point into clearer outline and focus. They will all help to shed a "light on the path".

Unanimous votes of thanks were tendered the citizens of Innisfail, the chairman and the press.

AGREEMENTS BETWEEN CREAMERIES AND THE DEPARTMENT FOR
MARKETING OF BUTTER.

Following are copies of the agreements that were entered into between the managements of creameries and the department for the marketing of butter during the year of 1911. Except that the "grading clause" (section 2) is added to the 1911 agreements Nos. 1 and 2 are the same as the previous year's agreements Nos. 3 and 4 respectively. Agreement No. 3 is for privately operated creameries.

(Agreement No. 1.)

MEMORANDUM OF AGREEMENT.

BETWEEN:

THE DAIRY COMMISSIONER, ACTING FOR THE DEPARTMENT OF AGRICULTURE FOR THE
PROVINCE OF ALBERTA

and

THE . . .

ASSOCIATION

1. The Dairy Commissioner agrees, for the period of one year from May 1st, 1911, to market the butter shipped to him by the association for that purpose to the best of his judgment and ability and to pay the association the net proceeds realized from the sales of such butter after deducting:

- (1) The cost of railway freight paid on the butter at Calgary.
- (2) The cost of packages and other supplies furnished by him to the said association for use in the creamery.
- (3) The *pro rata* cost of handling the butter in cold storage at Calgary until it is finally disposed of.
- (4) The charge of one cent per pound of butter manufactured to be applied as follows:
 - (a) On the repayment of any loan heretofore obtained by the association from the government.
 - (b) In payment of plant and equipment supplied or which heretofore may have been supplied and installed by the government the property in which said plant and equipment is to remain in the government till it is paid for.
- (5) A further charge to be applied:
 - (a) Towards the payment of an annual rental for the plant and equipment furnished or heretofore furnished by the government reckoned at the rate of three per cent. of such portion of the cost of the plant and equipment as is unpaid, such rental to be computed on the first day of January following the year in which such plant and equipment or any portion thereof is installed, and on each first day of January subsequent thereto (or subsequent to the year in which such plant and equipment has been installed if it has been installed prior to the date hereof) but no deduction shall be made from such rental by reason of the receipt of the whole or any part of the purchase price of such plant and equipment before the end of the year in which the rental is so computed.
 - (b) Towards the payment of the interest upon loans made by the government upon mortgage security or otherwise.

2. The Dairy Commissioner agrees to grade and classify according to its marketable quality all the butter received into the government cold storage for disposal during the season of 1911, to pay a premium of two (2) cents per pound on all butter graded as "firsts" and to maintain a uniform standard for grading.

3. The Dairy Commissioner agrees to pay the association on each shipment of butter received by him from the association such advances as he may estimate to be about eighty per cent. of its selling value and to pay the balance due on such sales after the season's butter has been disposed of.

4. The Dairy Commissioner agrees to insure the butter against loss by fire only while contained in the government storage building at Calgary as trustee for and on behalf of the association to the amount of two-thirds of its estimated market value but the creamery buildings, premises and plant are to be insured by the association on its own behalf and the Department of Agriculture is not to accept

or have any responsibility or liability in that connection. In any case in which the association is indebted to the government the premium receipt or any renewal receipts for such insurance shall be sent to the Dairy Commissioner.

5. The association agrees to make provision for the issuing of paid up shares to the persons supplying cream to the creamery, in proportion to the amounts paid in by them severally to the loan fund as set forth in sub-section 4 of section 1 of this agreement.

6. The association agrees to employ a properly qualified buttermaker, approved by the Dairy Commissioner, to accept and carry into effect such directions as the Dairy Commissioner may give from time to time respecting the delivery of cream to the creamery, the details of manufacturing and the packing and the shipping of the butter to be sold by him.

Dated at this day of
A.D. 1911.

Witness:
Witness:
Witness:
President of the Association.
Secretary of the Association.
Dairy Commissioner.

(Agreement No. 2.)

MEMORANDUM OF AGREEMENT.

BETWEEN:

THE DAIRY COMMISSIONER, ACTING FOR THE DEPARTMENT OF AGRICULTURE FOR THE PROVINCE OF ALBERTA

and

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- (1) The cost of railway freight paid on the butter at Calgary.
- (2) The cost of packages and other supplies furnished by him to the said association for use in the creamery.
- (3) The *pro rata* cost of handling the butter in cold storage at Calgary until it is finally disposed of.

2. The Dairy Commissioner agrees to grade and classify according to its marketable quality all the butter received into the government cold storage for disposal during the season of 1911, to pay a premium of two (2) cents per pound on all butter graded as "firsts" and to maintain a uniform standard for grading.

3. The Dairy Commissioner agrees to pay the association on each shipment of butter received by him from the association such advances as he may estimate to be about eighty per cent. of its selling value, and to pay the balance due on such sales after the season's butter has been disposed of.

4. The Dairy Commissioner agrees to insure the butter against loss by fire only while contained in the cold storage building at Calgary as trustee for and on behalf of the association to the amount of two-thirds of its estimated market value.

5. The association agrees to employ a properly qualified buttermaker, approved by the Dairy Commissioner, and to accept and carry into effect such directions as the Dairy Commissioner may give from time to time respecting the delivery of cream to the creamery, the details of the manufacturing, the packing and the shipping of the butter to be sold by him.

Dated at this day of
A.D. 1911.

Witness:
Witness:
Witness:
President of the Association.
Secretary of the Association.
Dairy Commissioner.

(Agreement No. 3.)

MEMORANDUM OF AGREEMENT.

BETWEEN:

THE DAIRY COMMISSIONER, ACTING FOR THE DEPARTMENT OF AGRICULTURE FOR
THE PROVINCE OF ALBERTA

and

1. The Dairy Commissioner agrees for the period of one year from March 1st, 1911, to market the butter shipped to him by . . . for that purpose to the best of his judgment and ability and to pay the net proceeds realized from the sales of such butter after deducting:

- (1) The cost of railway freight paid on the butter at Calgary.
- (2) The cost of packages and other supplies furnished by him to the said . . . for use in the creamery.
- (3) The *pro rata* cost of handling the butter in cold storage at Calgary until it is finally disposed of.

2. The Dairy Commissioner agrees to grade and classify according to its marketable quality all the butter received into the government cold storage for disposal during the season of 1911, to pay a premium of two (2) cents per pound on all butter graded as "firsts" and to maintain a uniform standard for grading.

3. The Dairy Commissioner agrees to pay . . . on each shipment of butter received by him from . . . such advances as he may estimate to be about eighty per cent. of its selling value, and to pay the balance due on such sales after the season's butter has been disposed of.

4. The Dairy Commissioner agrees to insure the butter against loss by fire only while contained in the cold storage building at Calgary as trustee for, and on behalf of . . ., to the amount of two-thirds of its estimated market value.

5. . . . agrees to employ a properly qualified buttermaker, approved by the Dairy Commissioner, and to accept and carry into effect such directions as the Dairy Commissioner may give from time to time respecting the delivery of cream to the creamery, the details of the manufacturing, the packing and the shipping of the butter to be sold by him.

Dated this . . . day of . . .

A.D. 1911.

Witness:

Witness:

Dairy Commissioner.

VII.—DAIRY SCHOOL AT INNISFAIL.

While it was arranged to have short courses for creamery butter-makers follow the convention at Innisfail it was found necessary to postpone the second course on account of severe weather conditions and difficulty in securing suitable and sufficient milk and cream for the practical work.

The following circular sent to all the creameries and butter-makers in the province of whom we had a record, gives an outline of the work of the course:

SHORT COURSE IN DAIRYING, ALBERTA.

The Alberta Department of Agriculture will conduct a two weeks' course of instruction in creamery buttermaking and management at Innisfail, Alberta, commencing on Monday afternoon, the 3rd of April.

A general invitation is extended to creamery buttermakers, secretaries and managers of the province to take advantage of the services of this course. Following is an outline of the work that will be taken up.

(a) In the class room: Lectures will be given on chemistry and bacteriology in relation to dairying; the principle underlying sanitary milk and cream production; testing and butter making; creamery book-keeping and management; markets and marketing of dairy products; dairy herd management, etc.

The school library contains text books and a number of agricultural and dairy journals for the use of the students in attendance.

(b) Practical work: The Innisfail creamery management has generously placed the creamery, equipment and cream supply at the disposal of the department for dairy school purposes and practical work will be carried on in the following departments:

- (1) Testing room: The testing of milk and cream for butter fat and acidity, and the testing of butter for moisture and salt contents. Complete instructions will be given in the use of the Babcock test; the acide-meter and alkaline tests; the Mitchell-Walker, Geldard, Farrington and Irish moisture tests, and in the use of a test for determining the salt contents of butter.
- (2) Buttermaking room: An ample supply of milk and cream is assured, and practical instructions will be given in this department in the pasteurization of milk and cream by the Reid and the Farrington pasteurizers; in preparing pure culture ferments for cream ripening; in the grading and scoring of cream and butter; in churning, working and packing butter.
- (3) Boiler room: The care and handling of boilers and engines, pipe-fitting, soldering and general repair work will be fully explained and demonstrated by the instructor in charge.
- (4) The book-keeping department will present a complete yet simple accounting system for creameries, including patrons' accounts, stock book, cash and general ledger, specimen forms of these will be given to each student so he may become familiar with all details.

Buttermakers are invited to attend the whole course, but if this be impossible, anyone attending for a shorter time will get the greatest possible benefit from the time spent. A detailed programme of lectures, etc., will be mailed upon application to the Dairy Commissioner at Calgary.

The students will be expected to take part in the practical work under the direction of the instructor in charge of each department, or of any department in which they may wish to specialize.

The instructors of the school and their subjects are as follows, viz.:

The Dairy Commissioner, director of the school, deals with creamery management and economics, markets, dairy legislation, etc.

Prof. A. Lehmann, University of Alberta: Chemistry in relation to dairying.

Dr. D. G. Revell, Provincial Bacteriologist: Bacteriology in relation to dairying.

Mr. H. S. Pearson, Provincial Dairy Instructor: Buttermaking and pasteurization.

Mr. George W. Scott, Provincial Dairy Instructor: Testing of milk and its products.

Mr. J. R. Flan, Engineer: Boiler and engine, etc.

Mr. G. H. Hutton, Superintendent Experimental Farm, Lacombe: Dairy herd management.

Mr. F. W. Underwood, Accountant, Dairy Commissioner's Branch: Book-keeping.

The course was a success in every way. Nineteen butter-makers and creamery managers attended lectures and practical work, some throughout the course and others for a shorter time to take special subjects.

We are under special obligation to Drs. Revell and Lehmann for the splendid assistance they rendered to the staff of this branch in making the course as inclusive and useful as possible.

We are indebted also to the school board and creamery association of Innisfail for the use of class room in the Poplar Street school and for the use of the creamery for the practical work of the course.

VIII.—DAIRY INSTRUCTION AND INSPECTION.

SHORT COURSE SCHOOLS IN AGRICULTURE.

A series of lectures and practical demonstrations in home dairy work were given at each of the schools conducted by the department at Strathmore, Macleod, Innisfail and Vermilion in February and March, by the undersigned and by the dairy instructors. It was

very gratifying to note the interest with which the students in attendance followed the work. While it was impossible to properly cover the subject in the time allotted there is no doubt that the schools had the effect of whetting the appetites of a good many students for "more light." This they can and will find through study and observation.

CREAMERY INSTRUCTION AND INSPECTION.

During the year H. S. Pearson paid 59 visits to creameries in the district of Red Deer and north and Geo. W. Scott made 52 visits to creameries south of Red Deer. The instructors both report that their relation with and work among the creamery buttermakers has been most cordial and pleasant and that there is a marked and uniform improvement in the sanitary condition of the creameries as well as in the quality of their butter production for which due credit is given to the buttermakers in charge.

Reference has already been made to the amendments to "The Dairymen's Act" and the appointment of dairy inspectors. In order to secure uniformity and continuity of record in the reports of the inspectors the following score card has been specially prepared for their use:



AYRESHIRE COWS ON DEMONSTRATION FARM, OLDS.

ANNUAL REPORT, 1911

129

REPORT COVERING GENERAL MANAGEMENT, SANITARY CONDITION, CORRECTNESS, THOROUGHNESS, NEATNESS, ORDER.

Score.

Excellent	4 points
Good	3 "
Fair	2 "
Poor	1 "
Very poor.	0 "

NAME	SCORE	REMARKS
BOILER AND ENGINE—		
1. Boiler and connections.		
2. Engine and connections.		
3. General		
BUTTERMAKING ROOM—		
4. Interior surface		
5. Floor and gutter		
6. Churns, vats, etc		
7. Weighing scales.		
8. B.M. pump and connections		
9. Transp. cans and tinware		
10. Preparation of packages		
11. General		
Mold? Flies?		
OFFICE—		
12. Stock books and records		
13. General.		
SUPPLIES STORAGE—		
14. General.		
Mold?		
COLD STORAGE—		
15. Interior surface.		
16. Ice tubes and troughs		
Cold air circulation		
17. General...		
Mold? Temp °F.		
WATER SUPPLY—		
18. Well and surroundings.		
19. Pump and connections		
20. Water storage...		
Temp. water in tank °F.		
TESTING EQUIPMENT—		
21. Machine and fittings		
22. Glassware		
23. Test scales..		
DRAINAGE, SURROUNDINGS—		
24. General.		
25. General		
Total		

Recommendations, to be carried out not later than..

Copy of this report handed to.
Date of inspection .

Dairy Inspector.

REFERRING TO ITEMS IN THE ATTACHED FORM ENTITLED "DAIRY INSPECTION."

Full scores are to be given only for conditions and methods as outlined in the following:

1. Boiler properly cared for, flues kept clear of soot, pipe connections and steam valves tight.
2. Steam engine working smoothly, kept clean of grit, dust, waste oil and condensed steam and free of rust. Shafting clean, pulleys and belts in good repair.
3. Tools and fittings, oil and other supplies properly and conveniently arranged and stored; absence of useless articles or rubbish in the boiler room.
4. Walls, ceiling and posts neatly painted or whitewashed, windows and doors clean; absence of mold.
5. Floor in good condition, gutter tight and properly connected to drain.
6. Churns and other wooden utensils sweet and clean, vats likewise and suitably covered to protect their contents. Metal parts on churn, butter printing machine, etc., free of rust or grease.
7. Weighing scales accurate in balance, free of rust and verdigris.
8. Butter milk pump, connections and tank kept clean and free from offensive odors.
9. Transportation cans and cream haulers' equipment properly cleaned before leaving the creamery. Tinware bright and free from rust. Cream haulers' conveyances sanitary.
10. All parchment liners and wrappers prepared by being immersed for at least six hours in a solution of salt, reboiled each time fresh papers are put in; butter box material to receive a thin even coating of paraffin wax and to be carefully nailed. All boxes to be thoroughly rinsed out and lined before using.
11. General neatness and order, pure atmosphere, absence of useless articles or rubbish. (Equipment not in use should be stored elsewhere and in a dry place.)
12. Stock books covering butter production and supplies and other records required by law, neatly kept and up-to-date. Statements issued to patrons in accordance with the requirements of section 35 of The Dairymen's Act (Office Consolidation). All records, business correspondence, slips, stubs and printed forms properly arranged and filed for ready reference. Office supplies properly arranged and stored so as to minimize waste and to be convenient of access.
13. An office is a place provided for the dispatch of business and should look the part.
14. Dry wholesome atmosphere, well ventilated. Supplies arranged in an orderly manner as to sizes and kinds, easy of access and check. Absence of mold and mustiness.
15. Floor, walls and ceiling neatly whitewashed or varnished. Doors and windows clean and capable of being closed tightly to save cooling material.
16. Ice tubes and troughs kept clear of sawdust or straw (either of these packing materials are liable to become musty and ill smelling if allowed to accumulate in a wet condition.) In a cold air circulation system the air ducts should be fitted with slides.
17. Provision made for keeping the butter packages off the floor and for the circulation of cold air around the individual packages (this can be accomplished by the use of 1 inch by 2 inch wooden strips placed under each row of boxes, or by stacking the packages so as to expose the greatest possible surface to the action of the cold air). Purity and dryness of atmosphere and absence of mold.
18. Absence of all conditions and matter which may pollute the water in the well.
19. Free from leakage, smooth running and generally in good order.
20. Storage tank drained and cleaned regularly and sufficiently often to avoid contamination of the water while stored in it. Tank kept covered to prevent animals or flies, dust and other foreign matter from getting into it.
21. Centrifugal machine in good repair and smooth working order. Fittings tight.
22. Verified and stamped glassware for the Babcock test, thoroughly cleaned inside and out. Sample jars likewise cleaned, drained and dried in pure air.
23. To be kept thoroughly clean and bright and delicately balanced.
24. Drains and traps properly connected and regularly flushed. Absence of offensive odors from drainage in and around the creamery, or under the floors.
25. Approaches and immediate surroundings neat and orderly. Absence of rubbish and stagnant pools.

Dairy Commissioner's Office, Calgary, Alta., April 26, 1911.

At the opening of the buttermaking season the following letter was mailed to the management and buttermaker of each creamery in the province:

DEAR SIR,—

We enclose for your information a copy of the form which will be used by the dairy inspectors for recording and reporting the sanitary and other conditions, and methods, found at the creameries which they visit from time to time. Attached to the form you will find explanatory notes briefly outlining the conditions and methods for which the full score of "excellent" (four points) may be given. The numbered paragraphs in the "notes" have reference to the items bearing the corresponding numbers on the inspection form.

It is true that, strictly speaking, a few of the items included in the form such as, for instance, 1, 2 and a few others have no special bearing on the sanitary condition of a creamery but it is equally true that they all have a direct bearing upon efficient and economical management, the aim of every well regulated business. The inspector will be pleased to go over the whole matter with you when he calls and explain any point that may not be quite clear to you in connection with the inspection report form and accompanying notes.

While the dairy inspectors are charged with the duty of seeing the provisions of the Dairymen's Act complied with yet we wish it to be distinctly understood that their main work will be along advisory lines. You are invited to take full advantage of that phase of our work either by correspondence or by personal consultation whenever an opportunity offers.

Faithfully yours,

C. MARKER,

Dairy Commissioner.

The form for the inspector's report was prepared with the object of making it (1) inclusive, (2) concise and (3) easy for comparison.

Inclusive, so as to cover the main phases of the inside management of a creamery and kindred establishment. A careful and systematic inspection is necessary from time to time in a creamery and, for that matter, in any plant where food products are prepared and handled. The person in charge should on his own account make a careful and thorough inspection of his premises, plant and stock of supplies at least once a week and "put his house in order."

Concise, so as to show the whole record of the inspection on a page of foolscap paper.

Easy for comparison, in that the numerical values lend themselves better to comparison of totals or items from one inspection to another than do written "awards". The scores indicate at a glance, also, progress or retrogression.

It must be stated here, however, that no attempt has been made to indicate by mere arbitrary numbers the relative value or importance of the several headings from an economic or sanitary standpoint, as that would clearly be a matter of individual judgment and, as such, subject to a variation of opinions. The numerical values are intended merely to express in a concise form the conditions as found at the time of inspection.

In making out his report of the conditions as found at a given creamery the inspector considers in their appropriate connection the following factors: General management, sanitary condition, correctness, thoroughness, neatness and order.

He records in the "score" column the number which represents the conditions as found under each heading according to the four-point scale shown in the upper right hand corner of the report form, noting under "remarks" the principal defects found. These are afterwards summarized under "recommendations" and a signed copy of the report left with the manager of the creamery in whose presence the inspection is generally made and the various points discussed.

IX.—EXHIBITION WORK.

During the year the undersigned and the dairy instructors attended by special request the following exhibitions and placed the awards in the dairy classes, viz.:

Geo. W. Scott at Innisfail, Trochu, Pincher Creek, Milnerton, Bowden, Didsbury and Provost.

H. S. Pearson at Camrose.

C. Marker at Winnipeg and Regina.

The working dairy and the dairy competition at the Calgary Industrial Exhibition were conducted by the provincial dairy staff as in former years, at the request of the management.

X.—PUBLIC MEETINGS.

Special dairy meetings were attended and addressed as follows during the year:

By H. S. Pearson, Dairy Instructor, at Daysland, Wetaskiwin, Conjuging Creek and Meeting Creek.

By Geo. W. Scott, Dairy Instructor, at Bottrel and Elkton.

By C. Marker at Ferry Bank, Earlville, Ryley, Viking and Nanton.

These meetings were held under the auspices of the local creameries and were well attended.

XI.—CORRESPONDENCE.

Three thousand two hundred and seventy-six communications were received at this office during the year and 3,774 sent out. Since the change was made in the local management of the government creameries there has not been so much correspondence touching purely local creamery matters. There has been a considerable increase, however, in the correspondence from points outside as well as inside the province calling for information regarding the dairy industry generally and about specific phases of it.

XII.—ACKNOWLEDGMENTS.

I am pleased to take this opportunity to acknowledge the pleasant and cordial relations existing between the dairy operators of the province with whom the various services of this branch have come into contact and to commend the faithful, conscientious work done by the members of the staff in the field and in the office. They have individually shown a real personal interest and pride in the performance of their various duties towards the department and the public.

The agricultural press and the local daily and weekly newspapers during the past year have devoted generously of their space to the discussion of matters related directly or indirectly to the development of the dairy industry and on that account alone richly deserve the thanks and appreciation of the dairyman, whether he be "the man beside the cow" or an official in the public service.

C. MARKER,

Dairy Commissioner.

3.—REPORT OF THE SUPERINTENDENT OF THE SEED AND WEED BRANCH.

SIR.—I have the honour to submit herewith my annual report as Superintendent of the Seed and Weed Branch.

During the months of December and January I attended the following institute meetings and seed fairs assisting in judging the grain and giving an address on "The Eradication of Noxious Weeds," at each meeting.

PLACE	NATURE OF MEETING
Cardston	Seed fair
Magrath.	"
Raymond	"
Macleod .	"
Pincher Creek	"
Taber.	"
Medicine Hat	"
Didsbury	"
Olds.	"
Bowden	"
Innisfail	"
Three Hills.	"
Lacombe	"
Stony Plain	Institute Meeting
Provost.	"
Hardisty.	"
Daysland..	"
Sedgewick.	"

Mounted specimens of noxious weeds were displayed at the above meetings for the inspection of those present. The farmers showed marked interest in examining the different weeds, and took an active part in discussing the methods of eradication. A large number seemed to be unaware of the serious nature of some of the weeds that are being distributed over Alberta. Undoubtedly a great deal of good can be done in this way for if the farmers were familiar with the more serious weeds, when they are just getting a foothold, it would be a comparatively easy matter to hold them in check or entirely eradicate them.

During the greater part of February, and the first part of March I acted as instructor at the short course schools held at Strathmore, February 6th, 1911; Macleod, February 13th to 25th; Vermilion, February 20th to March 4th; and Innisfail, February 27th to March 11th.

PREVALENT WEEDS.

During the season of 1910 it was found that the weed inspectors' districts were too large, it being impossible for the local inspectors to look after their districts in an efficient manner. In view of this, it was decided to increase the number of districts from 33 to 50. The districts were greatly reduced in size in Southern Alberta where large areas of valuable land are badly infested with tumbling mustard, hare's ear mustard, and stinkweed. These weeds are only found in central and northern Alberta to a limited extent. A very persistent fight has been made against them this year, not only to prevent their spread north, but to improve conditions where they already existed.

Inspectors in many parts of Southern Alberta were put to work on the first day of May, I would strongly advise having them started in future, not later than the first part of April in order to successfully combat the above mentioned weeds, which are winter annuals, starting like fall wheat, in the autumn and living through the winter ready to commence a vigorous growth in the early spring. The inspectors should be on the ground before any seeding is done, to prevent careless farmers from drilling in their seed through these weeds which are already deeply rooted in the soil. Grain seeded under these conditions stands absolutely no chance of producing a paying crop and is a serious menace to the surrounding country. There are hundreds of acres of land seeded every year under the above conditions. The weed inspectors prevented a great deal of land from being seeded in this manner during the past spring but were unable to get over their territory in time to prevent it all.

Where these winter annuals are at all prevalent, fall wheat should not be sown as these weeds are so deeply rooted by spring that it is impossible to destroy them by harrowing the wheat. Land badly infested should be summer-fallowed with thorough cultivation throughout the summer and spring grain grown on the land the following season, harrowing the grain as soon as it is up to prevent the growth of weeds.

The most serious weeds in central and northern Alberta are wild mustard, stinkweed, Canada thistle and ball mustard. Wild mustard is a persistent annual, having erect branching stems covered with fine hairs, the lower leaves being stalked and quite deeply indented; flowers a brighter yellow than other members of the mustard family. The seeds are smooth, spherical and of a very oily nature which makes them very strong in vitality.

Stinkweed, an annual and winter annual, is a most aggressive enemy of the grain grower. Plants that get a start in the autumn will live without injury throughout the winter and ripen their seeds very early in the spring. The plant is a bright green colour with clear white flowers one-eighth of an inch across. The pods are winged and notched at the top, each containing from eight to sixteen brown seeds. The surface of the seeds have on each face five or six circular lines starting at the basal scar and running around a central groove. This plant multiplies very rapidly and will soon choke out a grain crop and take possession of the land.

Land that is badly infested with these weeds should be thoroughly summer-fallowed. If the infested area is large, it would be advisable to seed the greater portion of it to grass and summer-fallow a portion at a time, being particular to do the work well, not allowing any of the weeds to get so large that the harrow will not completely destroy them.

In the case of stinkweed, be sure and cut the grass on the portion seeded down a number of times the first season as this weed will mature quite early. Do not allow it to reach the pod stage before cutting, as the plant will contain nutriment sufficient at that time to ripen the seeds. As soon as all the seed within a couple of inches of the surface have germinated you will not be bothered with stinkweed as the seed will not germinate when below this depth. However, it will retain its vitality and will grow when brought to the surface by cultivation.

Harrowing grain infested with wild mustard after the grain is nicely started will destroy the young plants. This method will also destroy stinkweed of spring growth, but will not affect the plants that have started the previous fall.

Canada thistle is a persistent perennial, with deep running rootstalks, the leaves are dark green in colour, waved and very prickly, flowers purplish pink in colour. This weed is quite commonly mistaken for the prairie bull thistle by those unfamiliar with the two weeds. The distinguishing features between the prairie bull thistle and the Canada thistle are that the prairie bull thistle has white woolly leaves and stems and the flower heads are much larger. The Canada thistle is a very persistent enemy of the farmer. It propagates both by seeds and rootstalks which spread very rapidly and send up new shoots and flowering stems. It is a vigorous grower and if not properly checked will soon crowd out a crop. If the Canada thistle is only present in small patches they can be smothered out by covering the patches deeply with a mixture of straw and earth. Where the infested area is large, allow the plants to grow until they are in the bud stage and then plow deeply. Be sure to turn the plants well under. By allowing the weeds to reach the bud stage, the roots will become somewhat exhausted of food material and are in a weakened condition. Cultivate with a sharp sheared cultivator at intervals each time new stems are thrown up thus weakening the roots of the plants. If this method of cultivation is followed up thoroughly, the Canada thistle will soon disappear.

Where scattering plants appear in the grain field they should be cut out with a spud hoe. Time spent in this way will give good returns. The farmer should always be on the alert for new weeds and destroy them before they increase in number.

SPRAYING MUSTARD WITH CHEMICALS.

Repeated tests at the various experiment stations in the United States and Canada have proved beyond doubt that solutions of bluestone (blue vitrol or copper sulphate) or of copperas of iron sulphate can be used successfully to destroy wild mustard in cereal crops without injury to the growing grain. The results of the majority of experiments would seem to indicate that iron sulphate is on the whole more satisfactory for this purpose than copper sulphate, besides being somewhat less expensive.

Owing to the large area contained in the majority of grain fields in this province the department has hesitated to suggest spraying as a practical remedy for the destruction of mustard. Hand pulling and proper methods of cultivation such as harrowing the fields badly infested when the grain is small, have proven fairly effective and it has been found that the more progressive farmers are readily following this system. In very bad cases, summer-fallowing has been resorted to.

In cases where fields are badly infested, many farmers have felt the need for some method which would destroy practically all the mustard plants and still give them the use of the land. It was thought that spraying would fill the bill as a successful remedy in such cases.

Mustard spraying can be successfully done with a hand sprayer attached to a forty gallon barrel, or any sprayer which will throw a fairly fine spray forcibly upon the plants. It was thought more practicable to use a power outfit for this purpose in connection with the demonstrations conducted by this department. The outfit purchased has a 100 gallon tank and pump, mounted on two wheels, and power for pumping is generated by a gearing attached to the wheels. By means of an air tank a pressure of 100 pounds was kept up continuously. A high pressure is necessary in order to force the spray through the leaves of the grain upon the leaves of

the mustard plants. The spray was distributed through a hollow tube 12 feet in length with nozzles attached 2 feet apart along the entire length of the rod.

A 20 per cent. solution of iron sulphate was used. This was made by mixing 80 pounds of iron sulphate with 40 gallons of water. A stronger solution than this is liable to injure the crop. If copper sulphate is used a two per cent. solution (one pound copper sulphate to five gallons of water) is sufficiently strong.

Spraying should be done on a bright sunny day when the young mustard plants are well up and just about to come into flower. If the solution is applied too late,—for instance if the seed pods have been formed—the tougher stalks will not be entirely killed, a few seeds will be produced and the results will not be entirely satisfactory.

The spraying demonstration initiated by this department was held at Olds under the supervision of Mr. H. W. Scott, at that time manager of the demonstration farm in that place. A large field of oats on an adjoining farm, badly infested with both wild and ball mustard gave an excellent opportunity to demonstrate the effects of spraying. This field was divided into plots. A strip of several acres down one side of the field was sprayed and an adjoining strip was left unsprayed, and then another strip was sprayed. In this manner the results of the spraying were most strikingly demonstrated. Though the grain was very rank and the mustard plants rather far advanced the mustard was almost entirely destroyed in the sprayed plots, except in cases where the pods were developed, while in portions of the unsprayed plots, the mustard developed to such an extent as to choke out the crop almost entirely. Great interest was manifested in the demonstration by the farmers living in the vicinity throughout the season.

Though no experiments have ever been conducted, so far as I have been able to find out, as to the effect of spraying a solution of iron sulphate upon ball mustard, it was found that in the sprayed plots much of the ball mustard was so weakened that no seed was produced.

As a result of the demonstration conducted at Olds, the department has no hesitation in recommending spraying as a practical remedy for wild mustard in this province, when the area to be sprayed is not too large, where the mustard is very thick, and the farmer does not wish to lose a year by summer-fallowing. It is hoped that with another year's experience more definite information will be available as to the effectiveness of the spray against ball mustard.

Where fairly large fields are to be sprayed, I would recommend the use of a 300-gallon tank mounted on a light truck waggon. In this case the use of a small gasoline engine to form the pumping power would considerably lighten the draft, also a large storage tank where the iron sulphate could be dissolved and a supply of the solution kept on hand, would greatly facilitate the work of spraying.

PURITY OF SEED GRAIN.

It was reported to the department that the seed grain being distributed by the Dominion Government to the settlers in Alberta was infested with noxious weed seeds. I immediately made a thorough examination of all grain it was possible to get access to and handed a report of the work to the official in charge of the distribution, advising him of the serious nature of the noxious weed

seeds present, with the result that a number of cars of grain were cleaned, but I regret to have to report that some of the grain was distributed that was condemned. The following table shows the results of the examination:

RESULTS OF INSPECTION OF CARS OF SEED GRAIN SUPPLIED TO THE FARMERS OF ALBERTA BY THE DOMINION GOVERNMENT.

CAR NO.	DISTRIBUTING POINT	KIND OF GRAIN	No. of Noxious Weed Seeds per 1,000 of Grain	No. and kind of Weed Seeds in sample examined
Elevator	Medicine Hat	Wheat	Less than one	15 Hare's Ear Mustard 6 Purple Cockle 6 Cow Cockle 2 Wild Mustard 1 Wild Oats 5 Wild Oats
96006, C.P.R.	Medicine Hat	"	"	1 Hare's Ear Mustard
87514	Medicine Hat	Flax	One	53 Wild Mustard
46652, C.N.R.	Medicine Hat	Oats	Four	22 Hare's Ear Mustard 8 Wild Oats 55 Ball Mustard 2 Wild Mustard 3 Wormseed Mustard 1 Hare's Ear Mustard
51506, C.N.R.	Medicine Hat	Oats	Two	24 Ball Mustard 8 Wild Oats
Elevator	Medicine Hat	"	Eight	4 Wild Oats 1 Ball Mustard 1 Purple Cockle 5 Cow Cockle 37 Hare's Ear Mustard 6 Wild Mustard
132034, C.P.R.	Medicine Hat	Oats	None	
48894, C.P.R.	Burdett	Wheat	Six	90 Ball Mustard 3 Wild Oats
133444, C.P.R.	Burdett	Oats	None	
307574, G.T.P.	Purple Springs	"	Less than one	2 Wild Oats
44576, C.N.R.	Grassy Lake	"	"	1 Wild Oats
35998, C.P.R.	Grassy Lake	Wheat	"	3 Purple Cockle
308334, G.T.P.	Bow Island	Oats	None	
46670, C.P.R.	Bow Island	Wheat	One	1 Cow Cockle 2 Purple Cockle 1 Wild Mustard 2 Hare's Ear Mustard 4 Stinkweed 8 Tumbling Mustard 7 Purple Cockle 3 Cow Cockle 1 Stinkweed 10 Hare's Ear Mustard 4 Wild Mustard 22 Tumbling Mustard 1 Wild Oats
70516, C.P.R.	Bow Island	Wheat	Three	
53224, C.P.R.	Coutts	Oats	Less than one	
40880	Coutts	Wheat	Three	
40542	Milk River	"	"	7 Stinkweed 20 Hare's Ear Mustard 1 Cow Cockle 1 Purple Cockle
40880, C.P.R.	Milk River	"	"	15 Hare's Ear Mustard 2 Stinkweed 9 Cow Cockle 4 Purple Cockle
56364,	Milk River.	"	Seven	58 Hare's Ear Mustard 9 Stinkweed 20 Cow Cockle 1 Wild Mustard

RESULTS OF INSPECTION OF CARS OF SEED GRAIN SUPPLIED TO THE FARMERS OF ALBERTA BY THE DOMINION GOVERNMENT.—*Continued.*

CAR NO.	DISTRIBUTING POINT	KIND OF GRAIN	No. of Noxious Weed Seeds per 1,000 of Grain	No. and kind of Weed Seeds in sample examined
41676, . . . 49960,	Milk River. Carlstadt	Oats Wheat	None Nineteen	1 Wild Mustard 52 Hare's Ear Mustard 35 Ball Mustard 5 Wormseed Mustard 2 Purple Cockle 2 Cow Cockle 1 Wild Oats 170 Stinkweed
37266, . . . 40958, . . . 308927, G.T.P..	Carlstadt Carlstadt Carlstadt	Oats Wheat "	None Less than one Seven	3 Wild Oats 2 Hare's Ear Mustard 175 Wormseed Mustard 1 Stinkweed
308927,	Carlstadt	"	Seven	103 Wormseed Mustard 8 Hare's Ear Mustard 1 Purple Cockle 2 Wild Oats 8 Stinkweed 5 Wild Oats 5 Purple Cockle 11 Cow Cockle 48 Stinkweed 50 Hare's Ear Mustard 2 Wormseed Mustard 3 Ball Mustard 2 Wormseed Mustard 1 Wild Oats
Elevator	Irvine	Wheat	Seven	5 Purple Cockle 11 Cow Cockle 48 Stinkweed 50 Hare's Ear Mustard 2 Wormseed Mustard 3 Ball Mustard 2 Wormseed Mustard 1 Wild Oats
37550,	Irvine.	Oats	Less than one	3 Wild Oats 2 Wormseed Mustard 1 Wild Oats
For sale by Mr. Schaller. .	Irvine	Wheat	"	4 Wild Oats 5 Hare's Ear Mustard
"	"	Oats	Six	70 Wild Oats 2 Wormseed Mustard 23 Ball Mustard 1 Wild Mustard 13 Hare's Ear Mustard Hare's Ear Mustard Stinkweed Wild Mustard Cow Cockle Purple Cockle
86674, C.P.R.	Warner.	Wheat	Six	8 Wild Oats 78 Hare's Ear Mustard 13 Stinkweed 10 Wild Mustard 8 Cow Cockle 1 Purple Cockle 8 Wild Oats 1 Ball Mustard
94166, C.P.R.	"	Wheat	Twelve	7 Wild Oats 1 Hare's Ear Mustard 4 Ball Mustard
103724, C.B.Q.	"	Oats	One	2 Wild Oats 2 Russian Pigweed 1 Cow Cockle
72700,	Lethbridge, Car- mangay & Kipp	Oats	Three	2 Wild Oats 1 Wild Oats 1 Wild Oats 3 in 9600
30608, G.T.P.. 85252, C.P.R. .	" "	" Wheat	None One	2 Wild Oats 1 Hare's Ear Mustard 1 Cow Cockle
37628, C.P.R. . 83136, C.P.R. . 36130,	" " Carmangay . . .	" " "	One Less than one 3 in 9600	2 Wild Oats 1 Wild Oats 1 Wild Oats 1 Hare's Ear Mustard 1 Cow Cockle

RESULTS OF INSPECTION OF CARS OF SEED GRAIN SUPPLIED TO THE FARMERS OF ALBERTA BY THE DOMINION GOVERNMENT.—Continued.

CAR NO.	DISTRIBUTING POINT	KIND OF GRAIN	No. of Noxious Weed Seeds per 1,000 of grain	No. and kind of Weed Seeds in sample examined
43705,	"	"	One	1 Purple Cockle 1 Stinkweed 14 Wild Oats
98600, C.P.R.	"	"	None	
35358, C.N.R.	Taber	Oats	Three	14 Wild Oats
148146, C.P.R.	"	"	"	23 Wild Oats
50366, P.R.P.	"	Wheat	Two	14 Stinkweed 23 Wormseed Mustard 1 Wild Oats
86606, C.P.R.	"	"	Less than one	1 Wild Oats 1 Red Root
46860	"	Oats	"	1 Wild Oats 1 Ball Mustard 1 Russian Thistle
Taylor Milling Co	"	"	"	2 Wild Oats 1 Wild Mustard 1 Cow Cockle
"	"	Wheat	"	1 Purple Cockle
Elevator	"	Oats	One	7 Wild Oats
"	"	Wheat	Less than one	1 Hare's Ear Mustard 4 Wild Oats
78014	Brooks	"	One	7 Wild Oats 5 Purple Cockle 1 Cow Cockle 1 Ball Mustard
131118	"	Oats	Three	16 Wild Oats 11 Ball Mustard
49960	"	Wheat	Less than one	2 Wild Oats
91704, C.P.R.	Seven Persons	"	Two	14 Wild Oats
33378, C.N.R.	"	Oats	Distributed before inspection	

LIST OF WEED INSPECTORS FOR THE SEASON OF 1911.

NAME	ADDRESS	CONSTITUENCY
Adair, T. H.	Stettler	Stettler—Townships 34 to 41 inclusive, Ranges 18 to 21 inclusive.
Alfred, J. G.	Raymond	Cardston and Lethbridge—Townships 4 to 6 inclusive, Ranges 20 and 21.
Britain, J. W.	Castor	Stettler—Townships 34 to 41 inclusive, Ranges 14 to 17 inclusive.
Blue, O.	Alsask	Stettler and Sedgewick—Townships 24 to 33 inclusive, Ranges 1 to 21 inclusive.
Brown, J. C.	Lethbridge	Lethbridge—Townships 7 to 9 inclusive, Ranges 18 to 23 inclusive.
Boileau, F. X.	Duvernay	Pakan—Townships 56 to 64 inclusive, ranges 6 to 11 inclusive.
Bowtell, H.	Frog Lake	Pakan—Township 54 to . . , ranges 1 to 5 inclusive.
Callaway, E. J.	Cochrane	Southern half of Cochrane constituency.
Capron, Joseph	Blackfalds	Red Deer constituency.
Despins, L. N.	Brosseau	Pakan—Townships 56 to 64 inclusive, Ranges 12 to 17 inclusive.
Drollinger, J. W.	Clareholm	Eastern portion of Clareholm constituency
Dockrey, H.	Carmangay	Western portion of Clareholm constituency.
Ellis, John	Bowell	Medicine Hat—Townships 12 to 22 inclusive, ranges 1 to 10 inclusive.
Ferris, Robert	Hayter	Sedgewick—Townships 34 to 40 inclusive, ranges 1 to 13 inclusive

LIST OF WEED INSPECTORS FOR THE SEASON OF 1911.—*Continued.*

NAME	ADDRESS	CONSTITUENCY
Fluker, John	Beaver Hills	Victoria constituency.
Holman, J	Stirling	Medicine Hat and Lethbridge—Townships 4 to 6 inc., ranges 17 to 19 inclusive.
Harris, D. E	Cardston	Cardston—Townships 1 to 3 inclusive, ranges 21 to 30 inclusive.
Hall, G. B	Cayley	Nanton and High River constituencies.
Haines, L. A	Turin	Lethbridge—Townships 10 to 14 inclusive, ranges 18 to 22 inclusive.
Hutton, G. H	Lacombe	Lacombe constituency.
Hull, Thomas	Leduc	Leduc constituency.
Hogan, E	St. Albert	St. Albert and Pembina constituencies.
June, Robert	Namoo	Sturgeon constituency.
Jaffery, Peter	Olds	Innisfail and Olds—Townships 32 to 37 inc., ranges 3 to 7 inclusive.
Kelly, W. J	Crossfield	Western portion of Didsbury and northern half of Cochrane.
Lively, G. J	Islay	Alexandra constituency.
Logan, James	Trochu	Innisfail, Olds and Didsbury—Townships 29 to 36 inc., ranges 22 to 25 inc.
Leslie, Andrew	Duhamel	Southern portion of Camrose constituency.
McGowan, R. J	Killam	Sedgewick—Townships 41 to 47 inc., ranges 6 to 15 inclusive.
McIntosh, H	Macleod	Macleod and southern portions of (Clareholm).
McBride, D	Davisburg	Okotoks constituency.
McArthur, D. K	Olds	Innisfail and Olds—Townships 32 to 36 inc., range 26, w. 4, to range 2, w. 5.
Murray, George	Seven Persons	Medicine Hat—Townships 1 to 12 inclusive, ranges 5 to 10 inclusive.
Mohan, T	Warner	Cardston—Townships 1 to 5 inclusive, ranges 11 to 20 inclusive.
Miquelon, L	Wetaskiwin	Wetaskiwin and Ponoka constituencies
Middleton, Walter	Bruce	Vegreville constituency.
Neel, J. M	Raymond	Cardston and Lethbridge—Townships 3 to 6 inclusive, ranges 22 to 25 inc.
Orlecki, S	Duvernay	Vermilion—Townships 52 to 55 inclusive, ranges 6 to 12 inclusive.
Robinson, H	Eyremore	Lethbridge—Townships 15 to 20 inclusive, ranges 16 to 22 inclusive.
Smibert, G. H	Elkwater	Medicine Hat—Townships 1 to 14 inclusive, ranges 1 to 4 inclusive.
Slawson, D. K	Burdett	Lethbridge—Townships 6 to 14 inclusive, ranges 11 to 14 inclusive.
Sproule, O. B	Orbindale	Vermilion—Townships 45 to 51 inclusive, ranges 6 to 12 inclusive.
Turnbull, Robert	Strathcona	Stratheona constituency.
Tate, Thomas	Bittern Lake	Northern half of Camrose constituency.
Ulmer, L	Stony Plain	Stony Plain and Lac Ste. Anne constituency.
VanOrman, R. A	Taber	Lethbridge—Townships 7 to 14 inclusive, ranges 15 to 17 inclusive.

It being impossible to look after the office work and at the same time keep in personal touch with the local inspectors three assistants were added to the staff. O. J. Hughes and Isaac McLure acted in this capacity for forty days during the months of July and August. The services of J. D. Smith were retained throughout the entire season.

These gentlemen did efficient work and I should like to make special mention of Mr. Smith's untiring efforts in Southern Alberta and would recommend that he be retained as a permanent assistant.

Respectfully submitted,

A. McKENNEY.

Superintendent.

4.—REPORT OF CHIEF GAME AND FIRE GUARDIAN.

SIR,—I have the honour to submit herewith my sixth annual report in connection with the enforcement of The Game Act and Prairie Fires Ordinance for the year 1911.

I.—PROTECTION OF GAME.

This branch of the department was first organized in July, 1906. Previous to this no provision was made for supporting the efforts of the voluntary game guardians in enforcing the provisions of The Game Ordinance of the North-West Territories, which was then in force, and which applied in all matters pertaining to the protection of game until the 15th day of March, 1907, when the present Game Act was assented to by His Honour the Lieutenant Governor. This Act, of course, has been amended from time to time and is now possibly one of the most complete enactments of its kind in North America. Although not as stringent as many of the acts providing for the protection of game in the various provinces and states, yet I do not think that it could be arranged to suit local conditions any better than at present. North of the 55th parallel which crosses the province from east to west at about the northern boundary of township 69, the residents are permitted to take game at any season of the year for the use of themselves and family. This privilege is also extended to parties travelling through that portion of the province referred to, in the event of their requiring the flesh of big game or game birds for the purpose of food. When the Act was adopted in 1907 provision was made for the obtaining of licenses by residents of the province who wished to hunt big game. The demand for these licenses is increasing each year as shown by previous reports, and which will be referred to and tabulated on the following pages. The revenue obtained from this source evidently demonstrated to the legislature the possibility of making the protection of game self-supporting, *i.e.*, the revenue derived from licenses and permits being sufficient to cover all necessary expenditure required in connection with the enforcing of the provisions of the Act. The revenue has continued to increase from year to year until in 1910 the excess of revenue over expenditure amounted to \$2,174.05. The present year shows a revenue of \$16,219.50 with an expenditure of \$8,935.00, leaving the sum of \$7,284.50 as a surplus over and above expenditure. It is only reasonable to expect that a gradual increase of revenue will be shown from year to year and which should in time amount to as much as is being obtained in many of the states to the south of us. Under the license system, in connection with which a commission for issuing licenses is allowed, game guardians have become more interested in game preservation. This, with an increase in the number of guardians, has resulted in the better enforcement and observance of the provisions of the Act from year to year. In many districts there are a few individuals who apparently delight in acting the part of what is commonly called "game hogs," and as other residents of the district are beginning to realize the necessity for game protection, they are taking exception to the actions of such persons, thereby simplifying the enforcement of the Act in such localities. Where an example is made of parties who

continually disregard the provisions of the Act, it has a salutary effect in discouraging other would-be law-breakers. This department appreciates the assistance given by settlers and others in reporting infractions of the Act and assisting in its enforcement. The public is becoming educated to the fact that it is to the advantage of all concerned to have the game protected, otherwise it will disappear or become exterminated like the buffalo.

BIG GAME.

Buffalo.—From reports received the wild buffalo, whose range is in the country near the northern boundary of the province, do not appear to be decreasing in numbers; the most authentic reports estimate the number of these animals at four hundred. I am advised that the Dominion Government have engaged two men to look after these animals and kill the timber wolves which in past years have been preying on the calves and old animals. It is believed that the animals range frequently in the Mackenzie district to the south of Fort Simpson and west and north of Fort Smith, which is on the line dividing Alberta and Mackenzie.

Elk are increasing in numbers under the protection given them and under ordinary conditions, with favourable seasons, should show an increase in numbers when the season opens in 1915.

Moose, Deer and Caribou do not show any apparent decrease in numbers; if anything I am of the opinion that moose and deer will continue to increase under the additional protection given them by prohibiting the killing of females and animals under one year of age. In many districts black-tailed deer were seen in 1911, for the first time in many years.

Mountain Sheep and Mountain Goats are increasing from year to year and are now reasonably plentiful. The establishing of preserves in the mountains has provided breeding grounds for these as well as other wild animals. This, together with the appointing of game guardians in the national parks, has resulted in the better protection of all wild animals in the mountains. In some sections the Indians still make their annual slaughter, but the establishing of parks has reduced the territory in which they have been allowed to operate. One sportsman reports having obtained his limit of mountain sheep in one day, being successful in obtaining two fine rams.

Antelope.—I regret that I am again compelled to report conditions as being unfavourable for antelope. Their range is being rapidly settled by homesteaders, consequently the territory over which they have formerly roamed is becoming reduced in size and will eventually be entirely settled, thereby crowding the antelope out of existence unless a reserve is established. I cannot too strongly recommend the establishing of such a reserve. In my opinion the most suitable locality would be on the Red Deer river somewhere in the neighbourhood of range 10, west of the 4th meridian. There is a large stretch of rough country which will never be fit for anything but range purposes, and if fenced would be an ideal place for antelope. I would also recommend that provision be made for the feeding of antelope in the winter, as the loss from severe weather, deep snow and restriction of range, has a tendency to reduce their numbers to a great extent each year. The efforts of the Dominion Government to preserve these animals in their present parks have apparently not been successful; hence my recommendation for the establishing of a park as specified above.

GAME BIRDS.

Ducks.—These valuable birds are decreasing in numbers. The casual observer would undoubtedly form the opinion that they are yet exceedingly plentiful. Those who have been in the province for a number of years and who have kept in touch with such matters realize that their numbers have become reduced, and from reports received from others parts of the continent, it would seem that it is only a question of time before they will become exceedingly scarce unless some means of propagating them is discovered. A strong movement is on foot now in the eastern states for the raising of wild ducks and establishing game farms. This, I think, will be the most effective means of preserving many of our game birds and animals. I would, therefore, recommend that where any tendency is displayed by farmers or others who are in a position to handle the matter in a suitable manner that they be given permission to raise wild ducks or establish a wild duck farm under proper control and subject to any legislation which may be adopted by the legislature, regulating the raising and marketing of these valuable game birds. In some sections of the province certain species of ducks were to be found as late as the 20th of December.

Prairie Chicken (sharp-tailed grouse).—I am pleased to be able to again report a plentiful supply of these birds over practically the whole of the province, but more especially in the timbered and brush country. Farmers, sportsmen and others interested in game preservation were well pleased with the supply of chicken. It is to be regretted, however, that in many sections shooting commenced in the month of September instead of waiting for the opening of the season on the 1st of October. Persons so shooting imagine that they are doing something clever by "potting" a few birds before the opening of the season, thereby taking advantage of the law-abiding principle of their neighbours who are willing to confine themselves to the open season.

Partridge (ruffed grouse).—My remarks respecting prairie chicken will apply also to partridge. It is to be hoped that the destructive fires which have been an annual occurrence in the past will be restricted to smaller areas in the future, as there is nothing so destructive to bird life and especially birds of the grouse family as prairie and forest fires.

Hungarian Partridge.—These birds are reported as doing nicely and increasing in numbers. They were imported from Europe by the sportsmen of the southern part of the province and placed in various districts. From reports received it is apparent that they are spreading yearly over an ever-increasing territory.

FUR-BEARING ANIMALS.

Beaver.—These animals are increasing in numbers and are reported from some districts as becoming considerable of a nuisance by damming rivers and creeks and cutting down timber in sections which are sparsely treed. The open seasons which were provided by Order in Council in previous years north of the 55th parallel, greatly assisted the inhabitants in that portion of the province referred to in providing for their families, as for some years other fur-bearing animals have been exceedingly scarce.

Mink, Fisher and Marten, and many fur-bearing animals which are not protected are again becoming more plentiful. The result will undoubtedly mean a great increase in the fur catch for the season of 1911 and 1912.

BIG GAME SECURED.

The open season for big game was very favourable for hunting, the result being an increase in the number of animals secured. Upwards of nine hundred more big game licenses were sold in 1911 than in 1910. The returns received from license holders giving the number of animals shot, shows the following result for the years 1907 to 1911 inclusive:

	1907	1908	1909	1910	1911
Antelope	49	45	89	126	101
Moose.	14	37	86	184	305
Caribou			5	8	30
Mountain Sheep			40	54	49
Mountain Goat.			38	46	56
Elk				7	
Deer	59	125	299	540	619

This of course does not show the total game killed, as very few of the residents in the unorganized districts purchased licenses. The records, however, for game killed south of the 55th parallel are reasonably correct.

BRANDING GAME HEADS.

Section 11 of the Act which requires the branding of game heads before buying or selling, shows the following results:

	1907	1908	1909	1910	1911
Mountain Sheep	216	2	9	11	2
Mountain Goat	62		1	1	1
Elk	41	3	4	2	2
Moose	39	29	33	32	40
Caribou	16	6	6	2	3
Deer.	142	15	26	26	40
Antelope	95	5		3	3

LICENSES AND PERMITS.

An increased number of licenses and permits were issued in 1911 as against former years. The amendment to the Act requiring residents of the province residing in cities, towns and villages to obtain licenses before hunting or shooting game birds, resulted in the sale of 7,452 of these licenses and an increase of 64 in the number of bird game licenses sold.

The following table shows licenses and permits sold each year:

	1907	1908	1909	1910	1911
General Game Licenses.	4	7	17	24	24
Bird Game Licenses	.		3	3	67
Trappers' Licenses	6	4	1	10	14
Resident's Big Game	446	529	1,162	1,997	813
Resident Farmer's Big Game					2,118
Resident Bird Game	.				7,452
Guides' Licenses	6	3	7	8	13
Camp Helpers' Licenses	1	1	1		5
Game Dealer's Licenses	12	23	39	30	16
Market Hunter's Licenses					60
Permits to export	15	17	19	35	24
Permits to collect	6	6	16	23	7

CONVICTIONS AND FINES.

	1908	1909	1910	1911
For hunting on Sunday	12	4	4	9
For hunting in close season	11	36	29	23
Buying and selling unbranded heads	8	6	3	1
Hunting without a license	7	6	14	17
Selling without a license.	7	7		1
Miscellaneous offences	4	2	9	7
Taking females.				4

REVENUE FROM GAME—MONEYS COLLECTED.

	1906	1907	1908	1909	1910	1911
General Game		\$93.00	\$175 00	\$425.00	\$600.00	\$ 600 00
Bird Game.				45.00	45.00	335.00
Trapper's.		40 00	40.00	10.00	100 00	140.00
Resident's Big Game		115 00	1,322 50	2,905.00	4,992 50	2,032.50
Resident Farmer's Big Game						2,118.00
Resident Bird Game						9,315 00
Guides?		30.00	15.00	35.00	40 00	65.00
Camp Helper's		2.50	2.50	2.50	10 00	25.00
Game Dealer's.		120.00	230.00	390 00	300 00	160.00
Market Hunter's						300.00
Permits to export		171 00	92 00	50.00	76 00	41.00
Permits to collect		65.00	50.00	55.00	45.00	35 00
Branding.		2,158.00	240.00	314.00	295 00	323 00
Confiscated Game				104.50	108.75	30.00
Fines		154 00	337.50	447.50	328 00	700 00
Total Revenue	\$145 00	\$3,948 50	\$2,504.50	\$4,793 50	\$6,940.25	\$16,219.50
Total expenditure	\$1,929.69	\$2,216 62	\$4,323.60	\$5,579 90	\$4,766 20	\$8,935.00
Surplus		1,731 88			\$2,174.05	\$7,284.50
Deficit	\$1,784 69		\$1,819.10	\$786 40		

By referring to the above table it will be found that the revenue exceeded the expenditure for the year 1911 to the extent of \$7,284.50, and by comparing the revenue for the years 1906 to 1911 inclusive, with the expenditure for the same years, it will be seen that the revenue from the sale of licenses and permits exceeds the expenditure by \$6,800.24. It is therefore demonstrated that a license system which requires hunters and sportsmen to purchase a license before hunting or shooting game, places the protection of game on a self-supporting basis, and should result in an increased revenue each year, with the result that more game guardians can be engaged to better protect the game. It is possible that the revenue from this source will become sufficiently large to warrant the payment of a bounty on animals and birds destructive to game. Of these the coyote and crow are the worst offenders.

TABLE I.—A RETURN SHOWING THE NUMBER AND VALUE OF THE FUR CATCH.

	FROM SMALL DEALERS			FROM WHOLESALE DEALERS & EXPORTERS	
	NO. OF SKINS	AVERAGE VALUE	TOTAL VALUE	NO. OF SKINS	TOTAL VALUE
Badger	163	\$1 01	\$165 90	150	\$337 50
Bear, Black	209	19 03	3,977 60	1,160	9,352 20
Bear, Brown	34	8.38	285 00	112	944 80
Bear, Grizzly	15	17.42	261 35		
Bear, Cub	15	4.10	61 50	55	275.00
Beaver	580	4.42	2,569 00	3,032	14,190.00
Coyote	1,858	2.98	5,555 25	1,897	8,127.00
Fisher.	15	8.40	126 00	65	880 00
Fox (Cross)	57	7.50	428 00	391	4,685 25
Fox (Red)	142	6.16	875 00	659	5,714.00
Fox (Silver)	8	150 00	1,200 00	69	16,707.20
Lynx	159	20.26	3,221.50	950	18,106.45
Marten	460	7.71	3,547 50	6,329	57,330 45
Mink	905	5 12	4,636 90	4,591	22,198.40
Otter	185	12 06	2,231 20	251	3,218.25
Muskrat	106,708	25	27,457 36	355,512	99,126.93
Skunk	284	1.17	334 50	253	342.92
Weasel	9,919	.49	4,906 62	17,319	8,550.51
Wolverine	346	3 05	1,055.87	143	860.51
Wolf.	30	9 35	280.00	270	1,028 10
Muskox				74	4,058 00
			\$63,176 05		\$276,033 46

To those who are interested in the protection of game the close seasons adopted in other places will no doubt be of interest. The following tables give the desired information for the year 1911:

TABLE III.—OPEN SEASON FOR GAME BIRDS IN VARIOUS STATES AND PROVINCES.

STATES	Sharp-tailed Grouse (Prairie Chicken) Ruffed Grouse (Partridge)	DUCK	GOOSE AND SWAN
Maine	Sept. 15 to Dec. 1.	Sept. 1 to Jan. 1	
New Hampshire	Oct. 1 to Dec. 1	Oct. 1 to Feb. 1	
Vermont	Sept. 15 to Nov. 15	Sept. 1 to Jan. 1	Sept. 1 to Jan. 1
Massachusetts	Oct. 15 to Nov. 15...	Sept. 15 to Jan. 1	Sept. 15 to Jan. 1
Rhode Island	Oct. 15 to Dec. 16	Aug. 15 to Apr. 1.	
Connecticut	Oct. 1 to Dec. 1	Sept. 1 to Jan. 1.	Sept. 1 to Jan. 1
New York	Oct. 1 to Dec. 1	Sept. 16 to Jan. 1	Sept. 16 to Jan. 11
Pennsylvania	Oct. 15 to Dec. 1	Sept. 1 to Apr. 10	Sept. 1 to Apr. 10
Delaware	Nov. 15 to Jan. 1	Oct. 1 to Apr. 16	Oct. 1 to Apr. 16
Maryland	Nov. 1 to Dec. 25.	Nov. 1 to Apr. 11	Nov. 1 to Apr. 11
Virginia	Nov. 1 to Feb. 1.	Oct. 15 to May 1.	Oct. 15 to May 1
West Virginia	Oct. 15 to Dec. 1	Sept. 1 to Apr. 20	Sept. 1 to Apr. 20
Kentucky	Nov. 15 to Jan. 1	Aug. 15 to Apr. 1.	Aug. 15 to Apr. 1
Ohio	Nov. 15 to Dec. 5.	Sept. 1 to Jan. 1.	Sept. 1 to Jan. 1
Michigan	Oct. 15 to Dec. 1	Sept. 1 to Jan. 2.	Sept. 1 to Jan. 2
Indiana.	Nov. 10 to Jan. 1.	Sept. 1 to Apr. 15	Sept. 1 to Apr. 15
Illinois	July 1, 1911.	Sept. 2 to Apr. 15	Sept. 2 to Apr. 15
Wisconsin	Sept. 10 to Dec. 1	Sept. 1 to Jan. 1.	Sept. 10 to May 1
Minnesota	Oct. 1 to Dec. 1	Sept. 7 to Dec. 1	Sept. 7 to Dec. 1
Iowa	Nov. 1 to Dec. 15	Sept. 1 to Apr. 15	Sept. 1 to Apr. 15
Missouri		Sept. 15 to May 1.	Sept. 15 to May 1
Kansas	Sept. 15 to Oct. 15	Sept. 1 to Apr. 15	Sept. 1 to Apr. 15
Nebraska	Oct. 1 to Dec. 1	Sept. 15 to Apr. 6	Sept. 15 to Apr. 6
South Dakota.	Sept. 10, 1911	Sept. 10 to Apr. 10	Sept. 10 to Apr. 10
North Dakota	Sept. 7 to Nov. 2	Sept. 7 to Dec. 16	Sept. 7 to Dec. 16
Montana.	Oct. 1 to Nov. 1	Sept. 1 to Jan. 1.	Sept. 1 to Jan. 1
Wyoming	Sept. 25 to Dec. 1.	Sept. 1 to Jan. 1	Sept. 1 to Jan. 1
Colorado	Sept. 10 to Oct. 11.	Sept. 10 to Apr. 16	Sept. 10 to Apr. 16
Florida.		Oct. 1 to Apr. 1	
Alabama	Dec. 1, 1912	Sept. 1 to Mar. 15.	Sept. 1 to Mar. 15
Mississippi		Sept. 1 to Mar. 1.	Sept. 1 to Mar. 1
Tennessee	Nov. 1 to Mar. 1.	Oct. 1 to Apr. 15	Oct. 1 to Apr. 15
Louisiana		Oct. 1 to Mar. 15.	Oct. 1 to Mar. 1
Oklahoma		Aug. 15 to May 1.	Aug. 15 to May 1
New Mexico.	Oct. 1 to Jan. 1.		
Arizona.	Oct. 15 to Feb. 1		
California.	Sept. 1, 1911.	Oct. 1 to Feb. 15	
Nevada.	Oct. 1 to Jan. 1	Sept. 15 to Mar. 15..	Sept. 15 to Mar. 15
Utah..	Mar. 11, 1913.	Oct. 1 to Jan. 1	Oct. 1 to Jan. 1
Idaho	Aug. 15 to Dec. 1.	Sept. 1 to Mar. 1.	Sept. 1 to Mar. 1
Washington.	Sept. 1 to Jan. 1.	Oct. 1 to Feb. 1	Oct. 1 to Feb. 1
Oregon...	Oct. 15 to Nov. 15..	Oct. 15 to Feb. 15	Oct. 1 to Mar. 1
Alaska.	Sept. 1 to Mar. 2.	Sept. 1 to Mar. 2.	Sept. 1 to Mar. 2
PROVINCES			
British Columbia...	Sept. 15 to Apr. 1.		
Yukon....	Sept. 1 to Mar. 15.	Aug. 10 to June 1.	Aug. 10 to June 1
Alberta.	Oct. 1 to Nov. 1	Aug. 23 to Jan. 1	
Saskatchewan.	Oct. 1 to Nov. 1	Sept. 1 to Jan. 1.	Sept. 1 to Jan. 1.
Manitoba...	Oct. 1 to Oct. 20.	Sept. 1 to Dec. 1.	
Ontario...	Oct. 15 to Nov. 15...	Sept. 15 to Dec. 16.	Sept. 15 to Apr. 16
Quebec.	Sept. 1 to Dec. 15...	Sept. 1 to Mar. 1.	
New Brunswick.	Sept. 15 to Dec. 1...	Sept. 1 to Dec. 2...	Sept. 1 to Dec. 2
Nova Scotia...	Oct. 1 to Nov. 1.	Aug. 15 to Mar. 1.	
Prince Edward Isl'd.	Oct. 1 to Dec. 1.	Aug. 20 to Jan. 1...	Sept. 15 to May 10
Newfoundl'nd	Oct. 1 to Dec. 15...	Oct. 1 to Dec. 15...	

TABLE IV.—OPEN SEASON FOR BIG GAME IN VARIOUS STATES AND PROVINCES.

STATES	DEER	ELK	MOOSE	ANTELOPE	SHEEP AND GOAT
Maine	Oct. 1 to Dec. 15		Oct. 15 to Dec. 1		
New Hampshire	Oct. 1 to Dec. 1				
Vermont	Oct. 25 to 31				
Massachusetts	To June 1, 1911				
Connecticut	Sept. 16 to Nov. 1				
New York					
New Jersey	Nov. 15 to Dec. 1				
Pennsylvania	Sept. 1 to Dec. 1				
Virginia	Oct. 15 to Dec. 1				
West Virginia	Sept. 1 to Mar. 1				
Kentucky	Nov. 10 to Dec. 1		To June 16, 1913		
Michigan	To June 15, 1919				
Illinois	Nov. 11 to Dec. 1		Nov. 10 to 30		
Wisconsin	Nov. 10 to 30				
Minnesota					
Iowa	Nov. 1 to Jan. 1				
Missouri	Nov. 1 to Dec. 1	Nov. 1 to Dec. 1			Nov. 1 to Dec. 1
South Dakota	Nov. 10 to Dec. 1				
North Dakota	Oct. 1 to Dec. 1	Oct. 1 to Dec. 1			
Montana	Sept. 25 to Dec. 1	Sept. 25 to Dec. 1			
Wyoming	Oct. 1 to Oct. 11		To Sept. 25, 1912		Oct. 1 to Dec. 1
Colorado	Nov. 1 to Feb. 1				
South Carolina	July 15 to Jan. 1				
Georgia	Nov. 1 to Feb. 1				
Florida	Nov. 1 to Jan. 1				
Alabama	Nov. 1 to Jan. 1				
Mississippi	Nov. 15 to Mar. 1				
Tennessee	To Oct. 1, 1911				
Arkansas	Sept. 1 to Feb. 1				
Texas	Nov. 1 to Jan. 1				
Oklahoma	Nov. 1 to Dec. 1				

TABLE IV.—OPEN SEASON FOR BIG GAME IN VARIOUS STATES AND PROVINCES.—*Continued.*

STATES	DEER	ELK	MOOSE	ANTELOPE	SHEEP AND GOAT
New Mexico . . .	Oct. 15 to Nov. 16				
Arizona . . .	Sept. 15 to Dec. 1				
California . . .	July 15 to Nov. 1				
Nevada . . .	Sept. 15 to Nov. 15				
Utah . . .	Oct. 15 to Nov. 15				
Idaho . . .	Sept. 1 to Dec. 1	Sept. 1 to Dec. 1.			
Washington . . .	Oct. 1 to Dec. 1				
Oregon . . .	Aug. 1 to Nov. 1 . . .				
Alaska . . .	Aug. 15 to Nov. 2 . .		Sept. 15 to Nov. 1 Aug. 20 to Jan. 1	Sept. 15 to Nov. 1 Aug. 20 to Jan. 1	Sept. 1 to Dec. 1 Oct. 1 to Dec. 1 Aug. 20 to Jan. 1
PROVINCES					
British Columbia	Sept. 1 to Dec. 16 . .				
Yukon . . .	Sept. 1 to Mar. 1 . .	Sept. 1 to Jan. 1	Sept. 1 to Jan. 1		Sept. 1 to Nov. 15
Alberta . . .	Nov. 1 to Dec. 15	Sept. 1 to Mar. 1 . .	Sept. 1 to Mar. 1 . .		Sept. 1 to Mar. 1
Saskatchewan . . .	Dec. 1 to Dec. 15	Nov. 15, 1912	Nov. 1 to Dec. 15	Oct. 1 to Nov. 1 . .	Sept. 1 to Oct. 15
Manitoba . . .	Dec. 1 to Dec. 15	Dec. 1 to Dec. 15	Dec. 1 to Dec. 15 . .	Oct. 1 to Nov. 15.	
Ontario . . .	Nov. 1 to Nov. 16 . .	Dec. 1 to Dec. 15	Dec. 1 to Dec. 15	Dec. 1 to Dec. 15	
Quebec . . .	Sept. 1 to Jan. 1 . .		Oct. 16 to Nov. 16 . .		
New Brunswick . . .	Sept. 1 to Jan. 1 . .		Sept. 1 to Jan. 1		
Nova Scotia . . .	Sept. 15 to Dec. 1 . .		Sept. 15 to Dec. 1 . .		
Newfoundland . . .	To Oct. 1, 1912.		Sept. 16 to Nov. 16 To Jan. 1, 1912.		

GAME GUARDIANS BY CONSTITUENCIES.

On the 31st of December there were 449 game guardians, being an increase over 1910 of 131. They have been arranged by constituencies as follows:

Alexandra.

Avery, Walter	. Vermilion.
Heathcote, Jos	. Kitscoty.
Moore, D. H	. Islay.
Carter, J. R.	. Wainwright.
Pound, L. L	. Ribstone.
Hassall, H.	. Lloydminster.
Shanks, W. K. ....	. Bashaw.
Campbell, Stuart, F.	. Kitscoty.
Lamont, Robt. Henry	. Greenglade.

Athabasca.

Biggs, Wm	. Fort McMurray.
Loutit, Peter	. Fort Chipewyan.
Walker, C. A	. Wabiscaw.

Camrose.

Dempsey, J. G	. Heather Brae.
Fleming, A. W	. Ohaton.
Mohler, Wm.	. Round Hill.
Mickleburgh, A	. Spilstead.
Price, Jas	. Heather Brac.
Pithouse, H. G	. New Sarepta.
Spilstead, Chas	. Spilstead.
Wilson, O. T	. Camrose.
Kezar, C. F.	. Ferintosh.
Batram, Thos	. New Serepta.
Kunke, F.	. Ferintosh.
Welles, W. D	. Daysland.
Griffis, H. H. ....	. Daysland.
Bailey, C. Stanley	. Camrose.
Olesberg, Olaf E	. Bawlf.
Neveu, Jas.	. New Norway.
Neveu, Joseph	. New Norway.
Yates, Wm	. Duhamel.
Wendt, W. F	. Edberg.
Brooks, M. W	. Bittern Lake.

Calgary.

Brodie, Neil	. Calgary.
Beveridge, S. F	. Calgary.
Campbell, D. W	. Calgary.
Grahame, G. M	. Calgary.
Wheeler, A. O	. Calgary.
Oswald, J. C.	. Calgary.
Kennerly, L. H	. Calgary.
McKay, W. G	. Calgary.
Dippie, G. F	. Calgary.
Martin, Fred R	. Calgary.
Martin, Alex	. Calgary.

Cardston.

Brown, John Geo	. Waterton Mill.
Sloan, John.	. Kimball.
Tolley, Wm. F	. Mountain View.

Claresholm.

Bagley, Travis.	Meadow Creek.
Lyndon, Wm.	Lyndon.
Ross, D. M.	Monarch.
Miller, J. W.	Carmangay.
Smith, Percy	Granum.

Cochrane.

Abell, E. H	Cochrane.
Bell, E. L	Inglis.
Bell, Ernest	Lochend.
Fraser, J. A. W.	Jumping Pound.
Graham, Wm	Dog Pound.
Grayson, Chas	Cochrane.
Johnston, Geo. W	Cochrane.
Meiklejohn, R. W	Cochrane.
McLeod, Geo.	Crossfield.
Robinson, R. G	Calgary.
Skinner, D. W.	Sampsonston.
Thomson, E. V	Dog Pound.
Edwards, Cecil	Glenbow.
Butler, Robt	Cochrane.
Farr, Leslie	Airdrie.
Davie, John S	Crossfield.
Spooner, J. A	Kew.
Baptie, Adam M	Exshaw.
Davey, Wm. C.	Airdrie.
McDougal, John B.	Morley.
Reid, Geo. A	Bottrel.

Didsbury.

Henson, Gordon	Sterlingville.
McLeod, John.	Sunnyslope.
McIntyre, Wm.	Didsbury.
Godden, Edwin	Tapscot.
Shantz, David	Didsbury.
Shantz, Allan R	Carstairs.
James, C. S.	Acme.

Edmonton.

Blackburn, B. F	Edmonton.
Bulmer, Geo	Edmonton.
Cooper, W. H	Edmonton.
Carpenter, J. V. E	Edmonton.
Hayes, J. O'Neil	Edmonton.
Mercer, J. B.	Edmonton.
Miller, Martin L	Edmonton.
Robertson, W. S.	Edmonton.
Rudd, H. E.	Edmonton.
Turnbull, Hugo	Edmonton.
Wilcox, C	Edmonton.
McEachren, Donald	Edmonton.
Smith, Robt	Edmonton.
Morris, H. G.	Edmonton.
Jellett, J. St. George	Edmonton.
McKenzie, K. B	Edmonton.
Thom, J. M.	Edmonton.
Somerville, F. B.	Edmonton.
Chambers, P. A.	Edmonton.
Blackwood, Chas	Edmonton.
McCallum, Donald	Edmonton.
Steckle, Norman	Edmonton.
Sutherland, George.	Edmonton.
Umbach, John H	Edmonton.
Wilson, G. S.	Edmonton.

Gleichen.

Bunny, B. H.	Bassano.
Brereton, David	Red Deer.
Brown, W. W.	Strathmore.
Hull, Geo. B.	Strathmore.
Martin, Dan, Jr	Rosebud Creek.
Clark, John, Jr	Gleichen.
Bruce, Edward M	Cluny.
Service, Wm	Gleichen.
Slude, David	Dorothy.
Robson, R. B.	Strathmore.
Nathan, J. H.	Beiseker.

High River.

Dunlop, Wm. A	High River.
Estcourt, Wm. H	Pekisko.
Gervais, Romain	Loma.
Brown, S. J.	Aldersyde.
Sexsmith, J. I.	High River.
Riddle, D. M	Baronet.
Kuck, Fred	Pekisko.
Baker, E. R	Pekisko.

Innisfail.

Archer, F. W	Innisfail.
Faris, Jas., Jr	Trenville.
Hunford, B	Markerville.
Milligan, R	Pine Lake.
Mustard, H. M	Markerville.
Morton-Bell, R	Trenville.
Robinson, Edmund	Stauffer.
Robinson, W. H	Stauffer.
Robinson, J. K	Little Red Deer.
Scott, Wm. L	Markerville.
Thaw, Guy	Raven.
Major, Donald	Stauffer.
Muir, B. A	Prairie Grange.
Thomson, Frank J	Innisfail.
Sanborn, J. E	Innisfail.
Bower, Len. D	Caroline.

Lacombe.

Brereton, T. A.	Clive.
Boyd, A. J.	Lacombe
Capron, Jos	Blackfalds.
Carritt, J. C	Bentley
Godfrey, Sidney	Lacombe.
McPherson, W. B	Bentley.
Pinnell, Chas	Alix.
Smith, Wm	Lockart.
Stephens, Fred	Lacombe.
Triplett, J. E	Forshee.
Waghorn, W	Blackfalds.
Wells, W. E	Whitebrush.
Evans, H. J. Angell	Lacombe.
Hueppleheuser, O. W.	Lockart.
Miller, Leroy B	Lacombe.

Lac Ste. Anne.

Musselman, D	Onoway.
Maloney, J. V	Roydale.
Pegrum, Frank.	Wabamun.
Shields, W. K	Wabamun.
White, Henry	Wabamun.
Swift, L. F.	Lac Ste. Anne.
Braithwaite, Geo.	Rexboro.

Leduc.

Alpaugh, E.	Conjuring Creek.
Buch, A. R.	Leduc.
Blades, W. F.	Leduc.
Brissard, Jos.	Leduc.
Clifford, F.	Conjuring Creek.
Erwin, Jonah.	Leduc.
Green, F. B.	Bonnie Glen.
Hudson, Wm.	Buford.
O'Mara, E.	O'Mara.
Peterson, Nels.	Millet.
Sanders, Nels A.	Thorsby.
Ohrn, Carl Herbert.	Ohrnville.
Sahlstrom, Walter.	Thorsby.
Stromsen, S. M.	Yule Meadow.
Barker, R. C.	Leduc.
Piggett, Ben.	Calmar.
Halwa, M. S.	Glidehurst.
Blades, Jas.	Millet.
Postle, Leonard.	Calmar.

Lethbridge City.

Case, H.	Lethbridge.
Withers, H. P.	Lethbridge.

Lethbridge District.

Layton, S. J.	Taber.
Wright, B. W.	Taber.
Ostlund, Gustav.	Stirling.
Crabb, S. A. B.	Barnwell.
Lomas, George.	Bow Island.
Olander, C. G.	Lethbridge.
Miller, Manley L.	Stirling.
O'Brien, T. J.	Raymond.

Medicine Hat.

Bray, J. H. G.	Medicine Hat.
Murray, Geo.	Seven Persons.
Rutherford, Wm.	Elkwater.
Rutherford, R.	Irvine.
Armstrong, Peter R.	Elkwater.
Robinson, Jas.	Josephburg.
Boyd, Robt.	Medicine Hat.
Hassard, H.	Medicine Hat.
Newby, Herbert Sutton.	Irvine.
Thurn, A. M.	Walsh.
Clarke, Maurice T.	Eagle Butte.
Bishop, Jesse.	Medicine Hat.
Stephens, H. J.	Carlstadt.
Murray, J. B.	Seven Persons.
Whiffin, Hartley A.	Suffield.

Macleod.

Cochlin, John.	Macleod.
Pearson, G.	Standoff.
Roberts, P. J.	Macleod.

Nanton.

Stanford, T. B.	Stavely.
Hughes, J. M.	Nanton.
Carmichael, W. A.	Champion.

Okotoks.

Austin, Frank C	.. De Winton.
Buckler, Eric W	.. Black Diamond.
May E. G	.. Calgary.
Craig, F	.. Midnapore.
Fulton, J	.. Kew.
Grant, John	.. Black Diamond.
Anderson, Herbert	.. Millarville.

Olds.

Byron, Thos	.. Eagle Hill.
Distman, A. C	.. Trochu Valley.
Starken, Swan.	.. Garrington.
Thompson, Colin	.. Red Lodge.
Thompson, Evan	.. Red Lodge.
Logan, N. W	.. Olds.
Grant, J. F	.. Olds.
McKim, H. H. . . .	.. Bowden.
Barathy, Sidney de.	.. Trochu.
Shenfield, E. W. . .	.. Bowden.
Durant, Harry	.. Trochu.
Brewster, J. I	.. Calgary.

Peace River.

English, W. S. O	.. Spirit River.
Gaudet, Jno. P.	.. Peace River Crossing.
Jones, Robt.	.. Fort Vermilion.
Monkman, Alex.	.. Grand Prairie.
McDonald, Duncan.	.. Dunvegan.

Pembina.

Clark, T. A	.. Pembina.
Cosens, F.	.. Sion.
Romeo, Jos. R	.. Peavine.
Mennier, I.	.. Mosside.
Lucas, Arthur	.. Clyde.
Maier, Wm. G	.. Sunicbend.
Barton, Robt	.. Mosside.
Matthews, Wm	.. Glenister.
Bray, Wm. B	.. Greencourt.
Edgson, Jno. A	.. Edison.

Pakan.

Shortridge, G. W	.. Caskeyville.
Despins, Louis Nap	.. Brosseau.
Borwick, John.	.. Cork.
McCartney, A. G	.. Moose, Tyrol.
Yealands, Geo	.. Pakan.
Veillet, Geo. E	.. Veillet.
Benerlin, Chas	.. St. Paul de Metis.

Pincher Creek.

Clarkson, R. B	.. Pincher Creek.
Garrault, L	.. Pincher Creek.
Hillier, Ernest	.. Twin Butte.
Hughson, A.	.. Lundbrek.
Porter, Geo. E.	.. Livingstone.
Swinney, J. W. T.	.. Yarrow.
Wilson, T. G.	.. Livingstone.
Willock, D. F. W	.. Pincher Creek.
Riviere, Henry	.. Pincher.
Dennis, Wilson	.. Mayercroft.
Dansey, R. C.	.. Pincher Creek.
Willdigg, Thos. S	.. Mayercroft.

Ponoka.

Craig, B. F	Bluff Centre.
Everts, Jas. . .	Wittenburg.
Fleming, Louis	Ponoka.
Fraser, A. B	Ponoka.
Schnoor, John	Ponoka.
Stewart, P. R	Earlville.
Davidson, A	Buckhorn.
Beeley, J. H	Rimbey.
Webster, O. L	Ponoka.
Fagen, M. A	Water Glen.
Craft, O. O	Asker.
Allan, Rolla B	Chesterwold.
Aldridge, C. D	Wittenburg.

Red Deer.

Bleay, Richard	Red Deer.
Cottingham, W. H	Red Deer.
Fisher, F. B	Red Deer.
Kendall, J. S	Red Deer.
Mellor, C. P	Red Deer.
Wallace, Jos	Red Deer.
Hart, J. P., Thos	Leslieville.
Pearson, Wm. H.	Red Deer.
Robinson, Stuart M	Red Deer.
McDonall, G. H.	Pitecox.

Rocky Mountain.

Francis, H. P. E	Pekisko.
McDougall, D.	Banff.
Robertson, Robt.	Banff.
Sibbald, H. E	Banff.
Hogarth, John.	Banff.
Bevan, Jack	Banff.

Sedgewick.

De Bord, J. W	Amisk.
Lyall, Chas. F	Strome.
Matusch, A. E	Amisk.
McDonald, J. S	Sedgewick.
De Pass, F.	Strome.
Reid, Elmer	Harland.
Robson, T. S	Killam.
Ward, M. H	Sedgewick.
Rae, J. D	Chinook.
Gillman, Thos. Herbert	Vallejo.
Schnider, Felix Chas.	Rosenheim.
Purdy, Edwin Brewer.	Sounding Lake.
Evans, Thos. J.	Provost.
Roderick, John Jas	Cairns.
Farquharson, Alex	Eye Hill.
Glockin, Daniel.	Czar.
Bogg, Andrew A	Hughenden.
Gerrier, Wm	Metiskow.
Aylesworth, Peter	Killam.
Dewar, Samuel B	Provost.
Wardner, Geo. J	Provost.
Brodie, Neil.	Clemens.
Jell, R. W	Coronation.
Loades, G. A	Viking.
Legate, Robt. P	Cadogan.
Maley, A. F.	Coronation.

St. Albert.

Kelly, Patrick...	St. Albert.
Verstracte, Camille.	Velleneuve.
McLaughlin, C...	Cardiff.
Gagnon, Sam.	St. Albert.
Piquette, J. A.	St. Albert.

Stettler

Barrett, E. W.	Kanata.
Brace, Henry...	Britain.
Critchley, H. D.	Red Willow.
Ducloy, Chas. E.	Content.
Grose, J. C.	Erskine.
Gray, W. B.	Stettler.
Harrington, W. W.	Ewing.
Norton-Taylor, S.	Hand Hills.
Trenaman, J. C.	Hand Hills.
Longson, H.	Stettler.
Ricketts, E. R.	Castor.
Cope, G. R.	Copeville.
Blades, R. H.	Gadsby.
Whiteoak, J. B.	Stevenville.
Berry, Edgar...	Halkirk.
McKay, D. J.	Munson.
Brown, G. L.	Castor.
Gibbons, Oliver.	Erskine.
Dennis, Walter.	Big Valley.
Hoe, Robt...	Stettler.
Malott, L. A.	Lake Thelma.
Moyer, John H.	Munson.
Russell, Jas.	Munson.
Wilson, J. A.	Hand Hills.

Stony Plain.

Butchart, J. B.	Inga.
Bennett, Jno.	Keephills.
Currie, Chas.	Graminia.
Deans, S. J.	Brightbank.
Groat, E. A.	Spruce Grove Centre.
Hoffman, M. L.	Tomahawk.
Hagen, S. C.	Winterburn.
Kuhl, Henry	Golden Spike.
MacGillycuddy, V. J.	Stony Plain.
McDonald, Dan.	Mewassin.
Pinchbeck, E.	Winterburn.
Jenkins, F. J.	Tomahawk.
McKinley, Murd.	Stony Plain.
Aspersen, Andrew.	Stony Plain.
Sims, Elmer.	Inga.
Reid, Jas.	Manly.
Fleming, E.	Woodbend.
Umbach, Israel.	Stony Plain.
Estock, Jas.	Inga.
Mills, Fred S.	Onoway.
Porter, Geo. R.	Keephills.
Atkinson, B. W.	Spruce Grove Centre.
Bates, Arthur E.	Inga.

Sturgeon.

Bailey, R.	Namao.
Gibbons, W. R.	Battenburg.
June, Robt.	Namao.
Kennedy, John.	Edmonton.
Milligan, John.	New Lunnion.
Mason, Wm.	Bon Accord.
Russell, John.	Athabasca Landing.

Tratt, O. T.	. Lamoureux.
Trotter, J. R.	. Lamoureux.
Whiteley, Wm. E.	. Landing Road, Edmonton.
Watt, W. W.	. Northbank.
Florence, A. S.	. Fedorah.
McLaughlin, C.	. Cardiff.
Walker, C. A.	. Athabasca Landing.

Strathcona.

Ellet, F. S.	. Sandy Lake, Strathcona.
Inkster, Jas.	. Strathcona.
Lackey, Hamilton	. East Clover Bar.
Smith, J. E.	. Strathcona.
Stephens, W. H.	. Strathcona.
Wilkinson, W. F.	. Clover Bar.
Adamson, Lawrence	. "Allanwood," Strathcona.
McLaggan, J. W.	. Strathcona.
Tipton, J. W.	. Strathcona.
Dunn, J. A.	. Strathcona.
Murphy, C. H.	. Strathconn.
Shields, W. K.	. Strathcona.

Vegreville.

Cookson, Geo., Jr.	. Tofield.
Gully, Lacy	. Vegreville.
George, A. H.	. Lavoy.
Hallberg, E. R.	. Chipman.
Loades, G. A.	. Viking.
Lavoy, Jos.	. Lavoy.
Morton, Hubert	. Lavoy.
Norn, Jos. A.	. Logan.
Roberge, C. C.	. Logan.
Shandro, A. S.	. Shandro.
Stewart, J. A.	. Mundare.
Trimble, John	. Vegreville.
Whyte, Basil	. Holden.
Watson, Andrew	. Chipman.
Wynn-MacKenzie, E. H.	. Warwick.
Gladena, Augustus	. Tofield.
Lynn, Percy E.	. Warwick.
Calvert, S. W.	. Chipman.
Moody, A. R.	. Beaver Lake.
Stewart, R.	. Whitford.
McCallum, J. S.	. Mundare.
McVittie, G. E.	. Holden.
Stewart, Geo.	. Vegreville.
Nelson, C. E.	. Ryley.
Ewanchuk, Stefan.	. Whitford.

Vermilion.

Armitage, W. H.	. Mannville.
Booher, Noah	. Mannville.
Graham, J.	. Vermilion.
Philbrick, D. L.	. Myrnam.
West, F. V.	. Vermilion.
McCormick, Wm.	. Tyrole.
McColman, D. C.	. Innisfree.
Good, W.	. Vermilion.
Campbell, A.	. Innisfree.
Burnham, Asa A.	. Viking.

Victoria.

Krebs, Johan	. Fort Saskatchewan.
Libbey, J. J.	. Fort Saskatchewan.
Simmons, E.	. Fort Saskatchewan.
Coxford, A. W.	. Lamont.
Nemirsky, Theo.	. Wostok.
Kittlitz, Ed.	. Bruderheim.
Reid, J. H.	. Lamont.

Wetaskiwin.

Barnard, A. H.	Wetaskiwin.
Dickson, A. R.	Wetaskiwin.
Cherrington, R. R.	Wetaskiwin.
Swanson, C. H.	Wetaskiwin.
Wood, A. G.	Wetaskiwin.
Wilcher, John G.	Lewisville.
Young, R. C.	Millet.
Stelfox, Henry	Battle Lake.
Aklund, David	Minnihik.
Larson, Ludvisk, C	Minnihik.

II.—PREVENTION OF PRAIRIE FIRES.

I am pleased to report that in 1911 there were very few destructive fires; in fact there were very few fires of any kind, the natural result being that there were very few convictions for infractions of the Prairie Fires Ordinance. The number of convictions secured and the penalties imposed for the years 1907 to 1911 inclusive, are as follows:

	NO. OF CONVICTIONS REPORTED	TOTAL FINES	AVERAGE FINE
1907	33	\$741.00	\$22.45
1908	105	1,570.00	14.95
1909	94	1,796.00	19.10
1910	247	4,247.38	17.20
1911	33	565.00	18.25

The following is a list of the voluntary fire guardians in the province arranged by constituencies:

Alexandra.

Roberts, Ben	Kitscoty.
Sheridan, T. F.	Wainwright.
Tonkin, E. A.	Dewberry.
Wilson, R. A.	Dewberry.
Skinner, F..	Dewberry.
Websdale, C.	Dewberry.
East, C	Greenlawn.
Babcock, Edward S	Lea Park.

Calgary.

Carter, D. .	Calgary.
Campbell, Dan W	Calgary.
Grahame, G. M	Calgary.
Johnston, Geo	Calgary.
Moss, Sidney H	Calgary.
Moss, Walter	Calgary.
McIntosh, J. G	Calgary.
McIntyre, R. W	Calgary.
Thompson, W. A	Calgary.
Wheeler, A. O.	Calgary.
Woolliams, W. D.	Calgary.

Camrose.

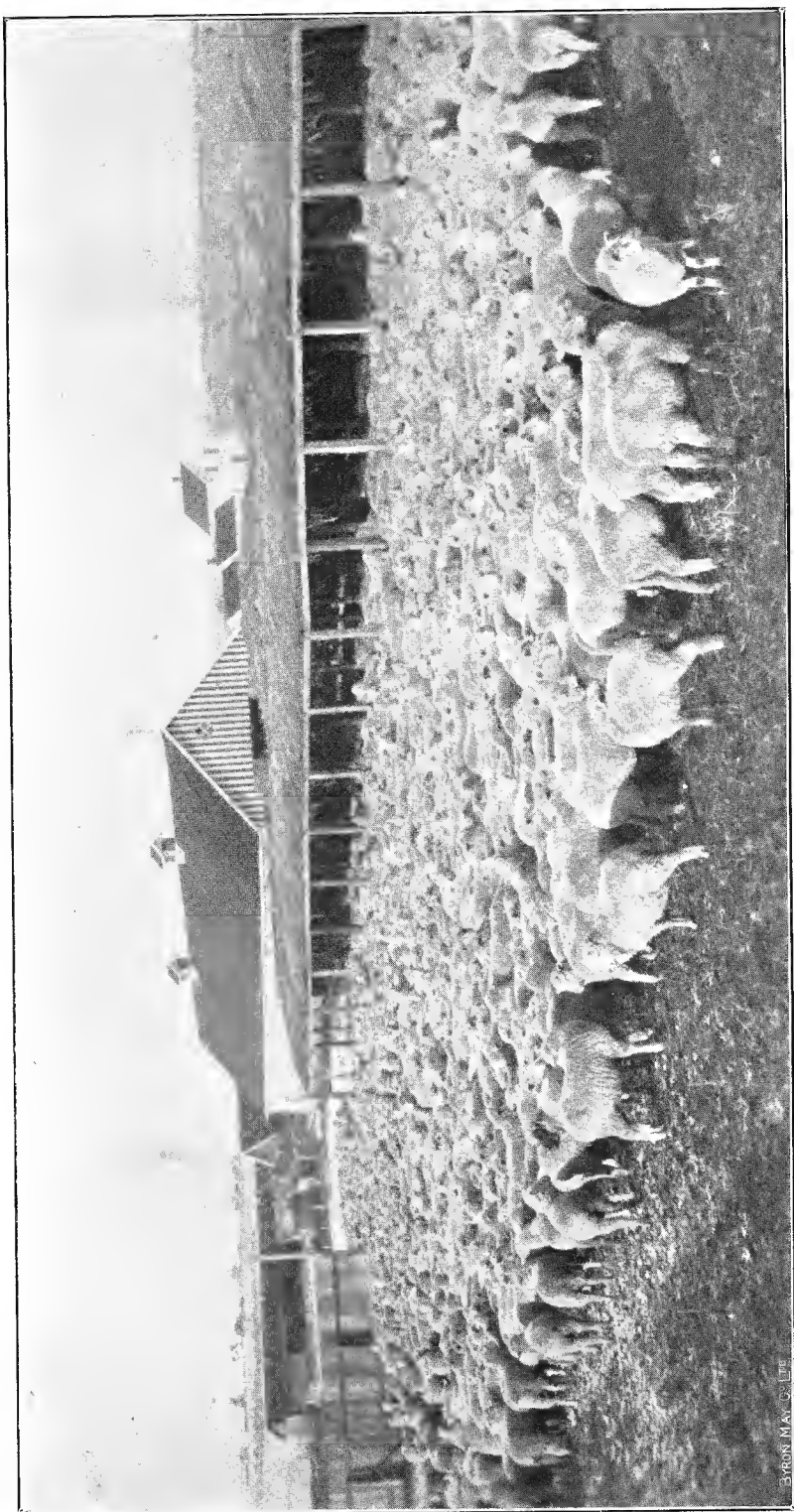
Barber, Jno. . . .	Iron Creek, Spring Lake
Bowie, Geo	Ferry Point.
Hodgson, Francis J	New Sarepta.
Johnston, Chas.	Edberg.
Roper, Ernest..	Bittern Lake.

Claresholm.

Lyndon, W. A

Lyndon.

*Cardston.*Ashe, Percy G. .
Shaw, V. SCoutts.
Cardston.*Cochrane.*Bell, E
Croxford, W. H
Elliot, Walter B
Fry, Herbert. . .
Goddard, Gilbert E
Graham, Wm
McPhee, M
Nixon, R. I
Reid, Geo. A .
Stevenson, Johnston.
Sutherland, Jas. A
Urquhart, Wm
McLeod, GeoBradbourne.
Airdrie.
Cochrane.
Cochrane.
Mitford.
Bradbourne.
Beaver Dam, Cochrane
Crossfield.
Cochrane.
Airdrie.
Crossfield.
Crossfield.
Crossfield.*Didsbury.*Evans, Arthur.
McLeod, Jno
Shantz, J. D.Three Hills.
Sunnyslope.
Didsbury.*Edmonton.*Hayes, J. O'Neill
Mitchell, Arch
Tough, Jas
Turnbull, Hugo. .
McEachren, DonaldEdmonton.
Edmonton.
Edmonton.
Edmonton.
Edmonton.*Gleichen.*Brown, W. W.
Clark, John, Jr
Colquhoun, O. G
Code, John B
Hicks, Thos
Hardwick, Douglas
Lawson, Jas
Maloney, A. S
Martin, Dan, Sr
McKinnon, L
Strange, Alex
Scot, Harry .Strathmore.
Gleichen.
Gleichen.
Dorothy.
Lathom.
Snake Valley, Gleichen
Dorothy.
Dunbow
Gleichen.
Langdon
Gleichen.
Gleichen.*High River.*Gervais, Romain
Holmes, W. E. . .
Thorne, Wilfred B
Carle, Richard PLoma.
High River.
Aldersyde.
Pekisko.*Innisfail.*Alford, R. P. .
Bitton, Wm. Shirley
Collins, Harry F. .
Duncan, Geo
Ellis, Geo. W.
Fleming, Geo
Gaetz, Fred W.
Morton-Bell, R. .
Mustard, H. M .
Wynn, Robt.Pine Lake.
Knee Hill Valley.
Pine Lake.
Innisfail.
Innisfail.
Penhold.
Pine Lake.
Trenville.
Markerville.
Knee Hill Valley.



SHEEP ON FEED AT CARSTAIRS.

BYRON MAY, C. L. T.

Lethbridge City.

Duff, Duncan	Lethbridge.
Fuller, Jas. Dixon	Lethbridge.
Kennedy, Edward.	Lethbridge.
Link, Adam	Lethbridge.
Nash, A. C.	Lethbridge.

Lethbridge District.

Cox, E	Grassy Lake.
Depew, Warren	Raymond.
Furman, Jno	Grassy Lake.
Kenny, E.	Pothole, Lethbridge.
McCarty, C.	Raymond.
Otatt, O. H.	Optic.
Slawson, D. K	Burdette.
Steed, Frank O.	Stirling.
Scott, O. J	Sweet Valley.
Jones, Elmer.	Sundial.
Connor, W. F	Sundial.
Thwaites, Robt.	Sundial.
Doan, R	Barney.

Leduc.

Blocker, Wm	Leduc.
Bradner, Henry.	Leduc.
Clifford, Frank	Conjuring Creek.
Fetherston, S. W.	Leduc.
Johnson, S. H	Beaumont.
Mortimer, Chas	Leduc.
McEwan, J	Conjuring Creek.
Ohrn, C. H	Ohrnville.
Sanders, Nels A	Ohrnville.

Lacombe.

Burns, Ed	Lamerton.
Burgess, Jas	Lamerton.
Capron, Jos.	Blackfalds.
Grose, W. E.	Clive.
Hickling, Horace	Alix.
Hilstad, Carl	Bentley.
Murphy, H. A	Lacombe.
Paisley, S. W	Canyon.
Pinnell, Chas	Alix.
Richards, Albert T	Lacombe.
Tees, James	Clive.
Tees, W. E	Tees.
Walters, Jas. L	Tees.
Whiteside, F. H	Lamerton.

Lac Ste Anne.

Musselman, D	Onoway.
White, H	Wabamun.

Macleod.

Cochrane, Wm. F	Macleod.
Gardner, C. W. E	Macleod.
Maryfield, Fred T	Macleod.

Medicine Hat.

Borthwick, Wm.	Medicine Hat.
Hargrave, W. H.	Walsh.
Marwick, Geo	Medicine Hat.
McLaughlin, J. D	Medicine Hat.

Boyd, Robt.	Medicine Hat.
Little Wm. J.	Medicine Hat.
Hargrave, J. G.	Walsh.
Hooper, Sidney.	Manyberries.
McClain, Fred.	Medicine Hat.

Nanton.

Narrish, J. D.	Nanton.
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Olds.

Distman, C.	Olds.
Kembry, Raymond A.	Olds.
Moore, C. Wm.	Tolman.
Wood, Chas. T.	Red Lodge.
Wyndham, W. T.	Huxley.
Brewster, J. I.	Calgary.

Okotoks.

Bannister, A. E.	Davisburg.
Fraser, J. A. W.	Jumping Pond.
Mickle, Chas. W.	Spring Bank.
Woolley-Dod, A. G.	Midnapore.

Ponoka.

Ravensburg, O. C.	Asker.
Tyner, Robt. E.	Ferrybank, Ponoka

Pincher Creek.

Connolly, Alf. T.	Pincher Creek.
Eddy, W. T.	Cowley.
Godsal, F. W.	Cowley.
Porter, Geo.	Livingstone.
Smith, Harold J.	Pincher Creek.

Pakan.

Thonipson, Lewis	Pakan.
Flamand, F.	Brosseau.
DuBord, E.	Durlingville

Red Deer.

Fiske, Robt. E.	Hillsdown
Fisher, F. B.	Red Deer.
Gaetz, Fred.	Red Deer.
Hoskin, Thos.	Red Deer.
Martin, Angus	Red Deer.
McKuchney, —	Red Deer.
Reinholt, J. F.	Red Deer.
Wilson, John	Evarts.
Frid, A. J.	Pitcox.
Leish, James.	Pitcox.
Hollender, T.	Evergreen.
Gerber, W.	Evergreen.
Kneeshaw, Percy	Gaetz Valley.

Rocky Mountains.

Bruneau, Jas. B.	Blairmore.
Brewster, Wm. H.	Banff

St. Albert.

Hughson, W. S.	Manawan.
Hall, Thos.	Manawan.
Verstracte, Camille.	Villeneuve.

Stony Plain.

Knapp, H. H.	Winterburn.
Mills, Chas	Inga.
McDonald, J. L.	Stoney Plain.
Steffen, Ed	Spruce Grove Centre.

Sturgeon.

Gibbons, W. R.	New Lunnion.
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Strathcona.

Ellet, Chas. C	Strathcona.
McAllister, Geo	Strathcona.
Townsend, Ed	Strathcona

Stettler.

Du Bois, J. F	Hand Hills.
Ellwood, Jas	Gopher Head.
Lensman, Gus	Mayville.
Lockwood, B	Hand Hills.
Lund, N. A.	Hand Hills.
Peters, Wm. W	Notre Dame de Savoy.
Patterson, Geo. W.	Red Willow.
Savage, J. G	Delia.
Davison, G. W.	Big Valley.
Brace, Henry	Britain.

Sedgewick.

Brightland, E. W	Talbot.
Eastmead, W	Caseleyville.
Reed, W. E	Caseleyville.
Seeman, Ludwig H.	Vallejo.
Weffer, N. B	Caseleyville.
Jones, H. M	Ethelwyn.
Grant, John	Ethelwyn.

Vegreville.

Borwick, John	Whitford.
Richardson, Silas	Whitford.
Brunton, C. H	Ryley.

Vermilion.

Talbot, W. C	Irma.
Weir, A. M	Mannville.
Campbell, A	Innisfree.
Good, Wm	Vermilion.

Victoria.

Bevington, Chas. E.	Fort Saskatchewan.
Belcher, Henry	Wostok.
Dzivenka, Jos.	Wostok.
Halkow, John	Wostok.
McGall, David	Star.
Simmons, W. L.	Fort Saskatchewan.
Nemirsky, Theo.	Wostok.

Wetaskiwin.

Newton, Haydon.	Wetaskiwin.
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Respectfully submitted,

BENJ. LAWTON,
Chief Game and Fire Guardian.

5.—REPORT OF THE POULTRY SUPERINTENDENT.

SIR,—I beg to submit the annual report of the Poultry Branch of the Department for the year 1911.

GENERAL.

I am pleased to state that the general interest manifested has been even more pronounced than in past years. This is noticeable in the enquiries received for stock and eggs of pure bred poultry of all varieties. This class of stock is fast replacing the scrub stock which predominated when this branch of the department was organized. Enquiries are not confined to the province of Alberta for constant application is received from the provinces of Saskatchewan and British Columbia. This I take as an indication that the work carried on in Alberta is attracting the attention of the neighbouring provinces.

The increased number of enquiries with reference to the housing of poultry is a good indication that the people generally are giving more attention to the housing of poultry. This adds materially to success in poultry raising.

Further advancement may be noted in the number of commercial poultry plants that are being established by experienced poultry raisers who are operating on strictly practical lines. Again there is a much greater interest noted among farmers in all parts of the province who are recognizing the value of their flocks as a revenue producing part of the farm work, and are keeping pure bred poultry of good quality, and are making an effort to produce high class products.

MARKETS.

While there has been a substantial increase in the supply, the prices have remained firm and if anything in advance of former years. There is no danger of an over-supply of poultry products for many years to come, but should there at any time be a surplus to dispose of the province of British Columbia offers a splendid market.

The dealers and wholesalers report that the poultry products now being placed on the market are of much better quality than formerly, notwithstanding there is still a large quantity that is not a credit to the producer. There are still many who do not flesh their birds properly which is a decided loss, particularly when suitable grain for fleshing is plentiful. Again many fail to fast and dry pluck. The unsightly condition of the birds resulting from the full crop and being scalded for plucking detracts from their appearance and greatly reduces their market value.

The same lack of attention is noticed in the marketing of eggs. Small, dirty and stale eggs are too evident in the markets. The small undersized eggs should be sorted from the larger ones and sold at their value. Dirty eggs are an indication of unsanitary conditions. Stale eggs are undesirable in the market and seriously effect the market price generally. We receive many complaints from country points that the prices quoted for strictly fresh eggs

during the winter months in the larger towns is much higher than those received locally. This is largely due to the fact that many held eggs are taken to the local store with the fresh ones and the local dealer has no alternative but to forward the eggs received classed as held eggs and these are placed in competition with cold storage eggs and command no better price.

During the past year I have strongly advocated the organizing of local poultry associations to work in sympathy with the co-operative movement now under way in the other provinces of the Dominion.

Such local organizations producing and placing on the market only high class products would to a great extent overcome the discrepancies that exist at present. The leading dealers of the province advise me that they are prepared to encourage such organizations by paying a premium price on such produce.

STANDARD BRED POULTRY AND EXHIBITIONS.

While there has been a marked improvement in pure bred utility poultry there has been an equal improvement in the numbers and quality of exhibition poultry. One has only to visit any of the fairs held by the older agricultural societies to note the exceptionally large increase in the numbers of entries, in many cases numbering hundreds where three or four years ago a score of birds would have been exhibited and these of a much inferior quality.

Many agricultural societies have erected suitable houses, fitted with exhibition coops, in which to exhibit their poultry. More extended prize lists are being introduced by way of encouragement to the exhibiting of standard bred poultry.

Special mention may be made of the winter poultry shows, particularly those held at Lethbridge, Calgary and Edmonton the latter two having about 1,000 entries at the last shows held. These exhibitions have developed so rapidly that they have outgrown the grant of \$300 provided in the original Agricultural Societies Ordinance. Believing this a handicap to the development of the pure bred poultry industry, at the request of members of the poultry associations recommendation was made to the Government that an increased grant be given to relieve the financial obligations which the associations hitherto depended on public subscription to meet. This recommendation has been acceded to and provision made whereby poultry associations expending \$500 or more in prize money will receive a grant of sixty-six and two-thirds of the actual prize money paid out.

OFFICE AND EDUCATIONAL WORK.

The office and educational work during the year has been very similar to that of former years. The educational work has largely been undertaken in connection with that of the Superintendent of Institutes and will no doubt be fully reported by him. A large number of poultry meetings were held in various districts of the province during the year and the reports show that attendance and general interest was good.

Special educational work was done in connection with the short course schools held at Macleod, Innisfail and Vermilion. At each of these schools the lectures and work given covered poultry houses breeding, feeding and caring for the flock; egg production, trap nest selection, feeding for eggs, incubation, rearing, fattening and marketing, and other matters associated with poultry keeping.

In keeping with the general advancement of the work the correspondence in the office has also been on the increase. Letters are now received from other countries, making enquiry regarding the possibilities of poultry raising in this province, the price of stock and eggs, land, buildings, equipment, etc. There is also a large correspondence with those enquiring where they can secure stock and eggs, and I have at all times tried to place them in communication with breeders in their neighbourhood. From letters received it would appear that there has been a good deal of disease prevalent throughout the province, and in fact the west generally. The diseases most common are the various forms of roup, tuberculosis, and the different forms of cholera. I have endeavoured to give the best remedies for the different diseases, which I often find are the result of unwholesome foods, foul runs, and damp, unsanitary quarters.

Further educational work was accomplished by the publication of a new poultry bulletin, Bulletin No. 2, "Practical Poultry Keeping." This bulletin is a revision of the one published in 1907 and deals with the following subjects: The Poultry Industry, Poultry Houses and Fixtures, Commercial Poultry Plants, Establishing and Developing a Flock, Strain Building for Egg Production, Hatching, Brooding and Rearing, Fattening, Killing and Marketing, Winter Egg Production, Poultry for Exhibition, Diseases and Parasites. Many of the illustrations are reproduced from photographs having reference to conditions within the province.

Since the publication of this bulletin there has been a large enquiry for same and no doubt it will do much to assist the poultry work of the province.

THE POULTRY BREEDING STATION.

The work of the poultry breeding station during the year has been extensive particularly in experimental work. There has been an unusually large number of visitors, and a good deal of the time of the manager in charge has been given to supplying these visitors with information relative to all departments of the work.

The demand for eggs during the hatching season for incubation purposes has been unusually large. As during the previous season, in order that the eggs from the plant might be distributed as far as possible, the number sent each applicant was limited to fifty, yet the demand was beyond the capacity of the plant and there were thousands of eggs applied for that could not be supplied.

Some idea of the popularity of the breeds can be seen by the following list which shows the number of eggs of the different breeds on order on March 31, 1911:

Barred Rocks	2,739
White Wyandottes	1,646
Buff Orpingtons	1,633
Rhode Island Reds	861
White Leghorns	517
White Rocks	284
Silver Wyandottes	173
Black Orpingtons	74
Golden Wyandottes	48
Columbia Wyandottes	46
Partridge Wyandottes	35
Total	8,056

It will be noticed by this how great the demand was even before the hatching season commenced. It will also be noticed that the leading varieties of the utility breeds, which are recommended by

the department for the farm, have been in the greatest demand. Barred Rocks appear to be most in demand of these breeds. Buff Orpingtons and White Wyandottes are about equal; Rhode Island Reds are next, followed by White Leghorns.

While the other varieties may be considered equally as good as utility birds, it is not the intention to continue keeping them, as it is thought more advisable to keep only such breeds as are most in demand by the farmers, particularly as the object of the plant is to assist the farmers in improving their flocks and while there are a number of high class birds in the various pens no attempt is made to produce exhibition stock. There are many fanciers who are giving this matter attention.

The trap nest work formerly conducted was discontinued this year as it was felt that the possibility of winter egg production had been fully demonstrated in former years, and it was found that the birds who gave the best returns in winter laying were not likely to be as prolific in the spring when a good supply of eggs are needed for hatching purposes.

The results of hatching at the plant were very good this season and from reports received it would appear that generally speaking little difficulty was experienced with the hatching season of 1911.

However, complaints were general as to the unsatisfactory conditions for rearing, many reporting that practically all the chicks hatched died. White diarrhoea appeared to be a general complaint. A disease that seems to be spreading all over the continent and one for which there is apparently no remedy.

COLD BROODING.

In 1910 some experiments were undertaken with cold brooding and the results being satisfactory this system was undertaken on a much more extensive scale during the rearing season of 1911.

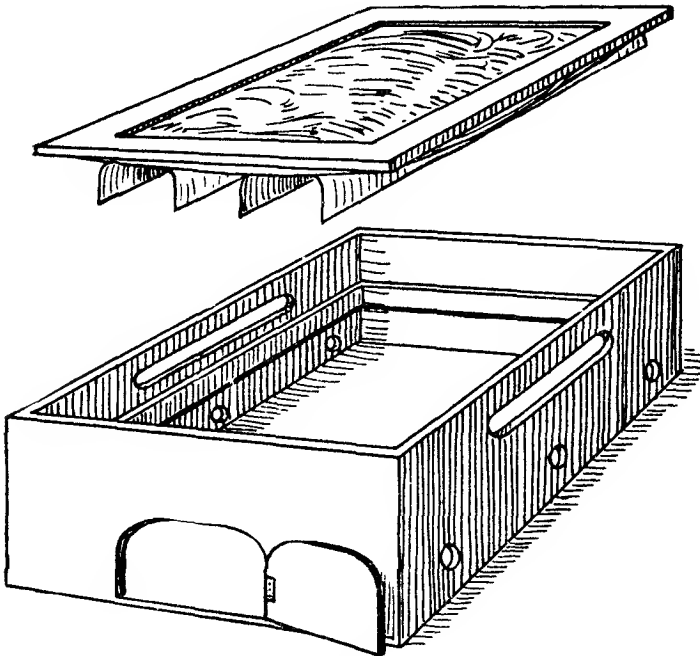


FIG. 1

The cold brooders as shown in Fig. I used in connection with this work are 18 inches by 20 inches and 8 inches deep. In front of the brooder is a door 4 by 6 inches, and on each side of the brooder two and one-half inches from the bottom and at equal distances apart three one-inch holes were bored for ventilation. Two inches below the top of the box and on the same side as the auger holes a strip 1 inch by 8 inches is cut out and the opening covered with cotton. The top of the box consists of a light wooden frame covered with cotton which is bagged to take the shape of the nest. Over this is placed three or four thicknesses of cotton batten, the number depending on the weather. The bottom of the brooder is filled with chaff to within 2½ inches from the cotton, the object being to have space only for one chick deep to prevent them from crowding on top of each other. To prevent further crowding the chicks are separated by three or four strips of cloth fastened to the cotton as shown in Fig. I. These strips should be put in so that they run lengthwise of the brooder. About forty chicks were placed in each brooder and kept there for two or three weeks. When they became too large for this brooder they were divided and placed in larger brooders of the same pattern. These larger brooders are placed in the regular colony brooder houses.

BROODER HOUSE.

A nursery for rearing purposes was constructed over the incubator cellar as illustrated in Fig. II.

Glass windows were placed on the south side of the brooder house and hinged at the bottom to open inward, cotton being tacked to the window frame and sash, in order that the air might enter above without causing a direct draught on the young chicks. The nursery floor was divided into pens by light frames covered with a fine mesh wire and hooked together, that the partitions might be easily moved for cleaning purposes. A brooder was placed in each run of 3 feet by 6 feet.

It is usually necessary to teach the young chicks to return to the brooder for a short time until they become familiar with the source of heat supply.

The chicks are placed direct from the incubator in runs on the south side of the nursery where they receive plenty of light and a certain amount of heat from the sun through the glass. They are kept here until ten days or two weeks old, or until the runs are required for a new hatch, when they are moved to runs at the north side of the nursery and kept there until ready to be moved to the colony houses.

Two styles of colony houses are used in connection with the work. The dimensions, 6 by 8 feet, are the same in both styles. In Fig. III the house is on 2 by 4 scantling and floored. The door is on the right side and ventilation and light are supplied on the south side through cotton placed on a frame and hinged so as to open when required. These houses are light in weight and can readily be drawn to any desired place when a new run is required.

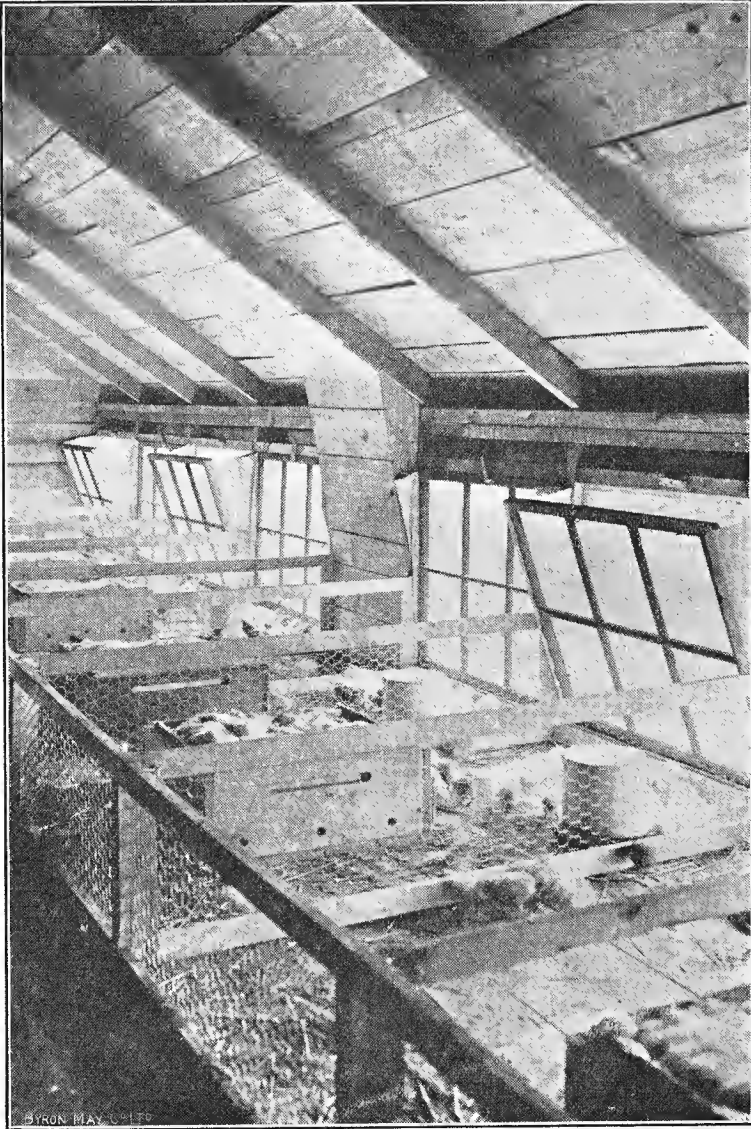


FIG. II

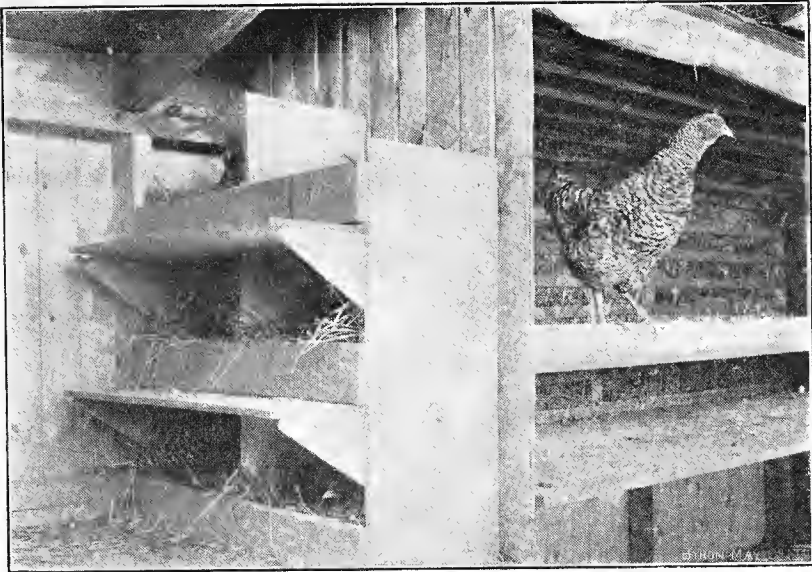


FIG. III. OLD STYLE.

The colony house shown in Fig. IV is without floor and constructed in five pieces in a knock down form and bolted together. It can be readily taken down and stored for winter if necessary. The upper part of the front of this house is enclosed by wire with frames covered with cotton as windows to be used on cold or windy weather. One half of the front is hinged and used as a door. No floor is used with this house although one can be constructed if so desired.

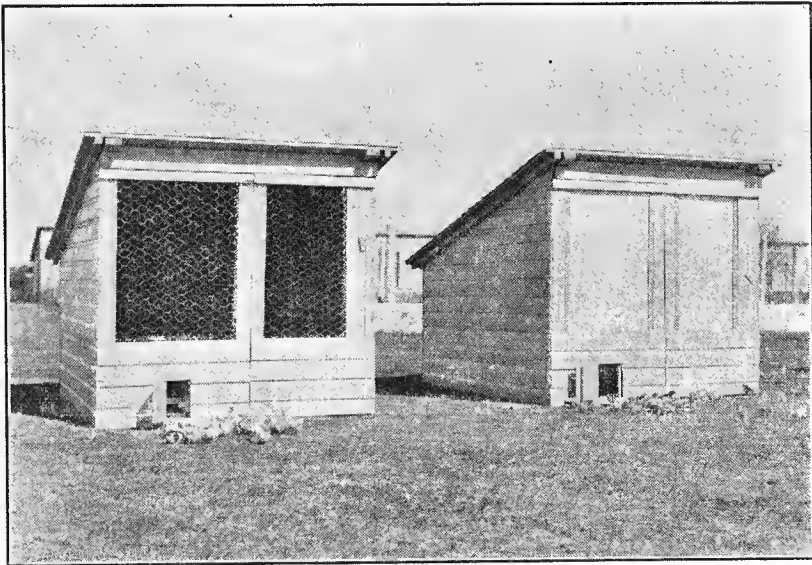


FIG. IV. NEW STYLE.

EXPERIMENTS IN HOUSING.

During the winter extensive experiments were made with the object of ascertaining the temperatures of the various houses. These experiments will be of special interest, particularly as they were made at the most northerly poultry experiment station in Canada. Full particulars are given in the new poultry bulletin, so only a brief account is given here. The houses in which the records were taken were constructed as follows:

No. 1 was constructed with clapboard and paper on the inside of studding and clapboard, paper and drop siding on the outside.

No. 2 of one thickness of V-joint lumber with cotton front.

No. 3 of one thickness of V-joint lumber with glass window.

No. 4 with one thickness of V-joint lumber with cotton window.

In each of these houses a crop curtain was used in front of the roosts,

For comparison of the different houses during cold weather the maximum and minimum reading of the thermometer for January 13, the coldest day of the winter, may be used. The maximum reading was 20 degrees below zero while the minimum was 55 below zero.

No. 1 house recorded a maximum of 7 and a minimum of 18 degrees below zero, while house No. 2 recorded a maximum of 11 and a minimum of 18 below, which was slightly in favour of the cotton house.

Nos. 3 and 4 represent two houses exactly alike with the exception that No. 4 has a cotton window while No. 3 has a glass window. On the above date the house with the glass window recorded a maximum of 2 degrees below zero and a minimum of 40 degrees below zero, while the house with the cotton window recorded a maximum of 4 and a minimum of 26 below zero. In comparing the temperatures of these houses there was thus a difference of 6 degrees in the maximum and 14 degrees in the minimum in favour of the house with the cotton window.

However, during the mild weather of early spring towards the end of February there was at times a slight difference in favour of the house with the glass window. This was no doubt due to the fact that the sun's rays penetrated the glass and warmed the pen.

TABLE OF TEMPERATURES FOR THE VARIOUS STYLES OF HOUSES WINTER
1910-11.

For the last half of the month of December.

DATE	Outside		House No. 16		House No. 11		House No. 13		House No. 12	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
15.			42	34	46	38	40	30	40	28
16			55	36	48	36	46	31	45	27
17			43	34	49	39	46	26	38	26
18										
19	46	35	45	40	48	40	40	38	42	38
20										
21	48	26	37	40	52	34	51	30	48	31
22	38	10	35	24	38	18	34	14	34	18
23	20	6	36	20	22	20	22	15	26	18
24	36	14	36	20	40	23	38	22	38	20
25	38	16	40	20	44	26	42	24	40	26
26	36	10	38	22	40	20	40	20	40	20
27	40	0	40	20	36	18	38	10	36	10
28	18	-2	26	15	25	6	20	8	40	10
29	6	6	20	5	4	2	20	2	18	-5
30	3	-11	18	10	12	6	10	0	6	-4
31	4	-24	16	4	2	1	10	-8	0	-9

TABLE OF TEMPERATURES FOR THE VARIOUS STYLES OF HOUSES WINTER
1910-11.

For the month of January:

DATE	Outside		House No. 16		House No. 11		House No. 13		House No. 12	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	-16	-42	6	-6	18	-16	2	-26	2	-28
2	20	-38	20	-4	22	-14	22	-22	20	-28
3	42	15	40	20	50	18	40	20	40	20
4	42	9	33	26	41	24	34	20	34	24
5	44	-11	37	26	39	26	37	24	39	22
6	32	-10	39	31	34	34	40	24	40	24
7	28	17	38	28	28	28	32	24	30	22
8	33	-10	30	28	36	6	30	6	29	4
9	-3	-28	1	0	2	-6	11	-12	10	-20
10	-17	-33	1	-2	24	-15	0	-16	-3	-16
11	-32	-42	17	-2	15	-10	11	-18	8	-20
12	-33	-44	17	-10	11	-18	11	-26	13	-26
13	-20	-55	7	-18	11	-18	4	-26	-2	-40
14	0	-43	20	-11	27	-20	21	-27	17	-30
15	8	-20	20	4	22	-2	18	-7	12	-11
16	-2	-17	18	7	22	-2	7	-5	10	-4
17	2	-17	27	15	27	0	10	-6	14	-6
18	-1	-20	27	2	25	-5	10	-12	10	-10
19	-2	-10	20	8	18	1	6	-4	14	-6
20	10	-22	20	-2	16	0	12	-5	16	-6
21	10	-16	24	14	19	2	17	-1	24	-2
22	32	-4	22	17	34	11	35	6	35	6
23	28	1	30	10	30	9	29	10	30	12
24	2	-16	20	4	11	2	14	-6	12	-10
25	-12	-21	11	3	14	3	2	-12	0	-13
26	-15	-26	15	2	16	-6	4	-14	2	-16
27	-10	-40	3	-12	4	-8	0	-22	0	-26
28	-5	-15	2	0	18	1	14	-4	14	-6
29	24	-25	24	-6	25	2	20	-10	23	-13
30	32	-2	30	10	30	22	30	-12	22	10
31	0	-25	21	-4	22	-1	15	12	10	-17

TABLE OF TEMPERATURES FOR THE VARIOUS STYLES OF HOUSES WINTER
1910-11.

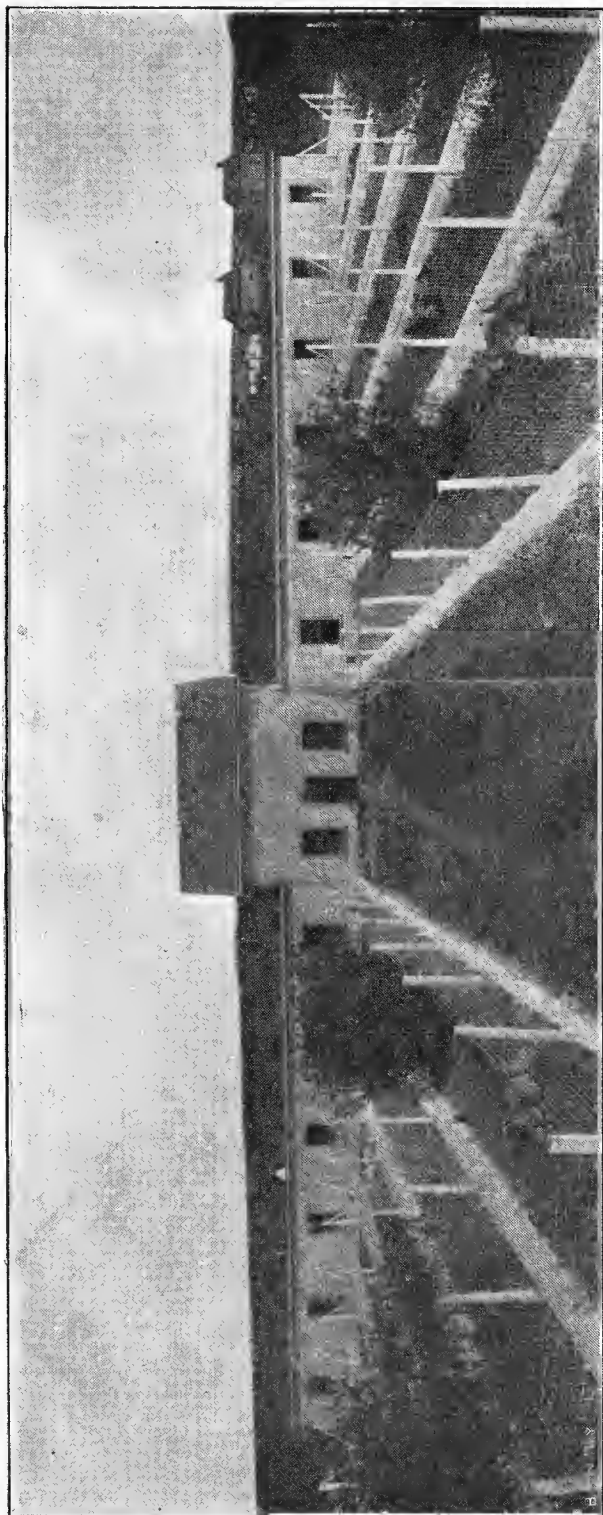
For the month of February:

DATE	Outside		House No. 16		House No. 11		House No. 13		House No. 12	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	14	-15	16	-6	18	5	12	-6	8	-12
2	-2	-44	8	-8	16	-20	6	-22	8	40
3	15	-5	20	6	30	2	28	-6	32	-4
4	18	-4	31	16	23	12	26	6	29	2
5										
6	20	-24	34	4	40	-2	30	-12	32	-14
7	38	-10	34	10	38	6	32	-3	36	-4
8	30	6	40	24	41	21	38	15	41	16
9	38	0	37	21	37	15	32	4	35	0
10	36	0	40	20	44	15	44	6	44	10
11	46	-4	37	22	38	18	34	4	34	0
12	26	6	42	23	48	18	44	8	44	10
13	30	9	40	24	40	22	36	10	36	10
14	32	-2	40	23	46	22	47	14	46	10
15	22	-5	40	26	38	22	42	8	34	8
16	19	-22	32	20	34	14	28	0	32	-40
17	24	-22	34	8	32	0	33	-14	34	-12
18	27	-4	32	7	40	0	38	-12	40	2
19	28	-6	42	14	38	10	44	0	38	-2
20	26	-2	40	20	41	14	38	-2	33	4
21	30	-4	38	16	40	14	36	2	32	6
22	48	4	44	18	42	14	44	0	44	4
23	43	2	50	23	55	14	55	6	42	12
24	36	20	50	22	54	40	47	34	50	35
25	25	7	47	22	46	21	42	23	46	30
26	35	-4	34	22	27	23	34	12	35	17
27	44	-4	42	15	42	15	52	0	47	5
28	44	11	49	18	55	16	49	16	52	20

TABLE OF TEMPERATURES FOR THE VARIOUS STYLES OF HOUSES WINTER
1910-11.

For the month of March:

DATE	Outside		House No. 16		House No. 11		House No. 13		House No. 12	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	50	8	59	25	66	23	61	13	62	18
2	39	22	48	37	47	33	43	27	48	33
3	36	15	42	30	46	28	38	20	40	24
4	28	15	46	30	54	28	44	20	45	22
5	30	9	40	22	42	20	40	12	44	16
6	36	10	46	22	41	22	40	14	44	16
7	26	8	38	23	33	21	37	20	40	17
8	42	6	34	20	36	20	34	10	34	16
9	32	11	37	25	40	23	40	16	36	20
10	54	15	52	23	62	28	60	18	56	20
11	41	-5	42	18	50	16	44	2	42	4
12	55	18	51	27	56	28	55	20	53	23
13	57	28	56	36	61	37	58	30	58	34
14	32	13	42	21	48	24	42	17	44	17
15	38	23	52	43	54	40	53	40	54	40
16	51	28	58	38	58	26	45	30	46	35
17	56	35	56	27	52	36	58	22	55	25
18	52	37	48	36	46	33	50	32	50	35
19	60	38	62	43	63	38	64	40	65	42
20...	62	24	64	37	68	38	62	28	64	34



CONTINUOUS STYLE OF POULTRY HOUSE AS USED AT THE PROVINCIAL POULTRY PLANT.

As previously stated no attempt was made to secure winter eggs, yet in all the houses eggs were produced throughout the winter, and had the birds been fed for egg production I feel sure they would have made a good record. One thing noticeable was the fact that in the colder houses, particularly the cotton front the birds all had a healthy, thrifty appearance.

While there are many who would no doubt be afraid to house their birds in the colder houses, I know of many in the province who are doing so with satisfactory results. From personal observation of this experiment I am convinced that a house cheap in construction and satisfactory in every way can be readily made from a combination of the plans of the three houses used in the experiment.

That is, the walls constructed of two thicknesses of lumber with paper between, the windows made with the lower half of the sash with glass and the upper half of cotton. A house of this style constructed with proper attention to ventilation, should meet the requirements of the climate of any district in the province.

VENTILATION.

Special attention was given to the various systems of ventilation in order to avoid the accumulation of frost on the walls and roof of the houses, which is always found in a poorly ventilated house. Two systems were used. In the apex roof poultry house, strips of board were placed on the plate, three or four inches apart and the apex partially filled with straw. In both ends of the apex an opening 18 inches square was made to allow a circulation of air through the straw. In the other houses ventilation was supplied through burlap or factory cotton placed over windows at the opposite ends of the house. Both these systems were found very satisfactory.

Respectfully submitted,

A. W. FOLEY,
Poultry Superintendent.

6.—REPORT OF THE RECORDER OF BRANDS.

SIR,—I have the honour to submit the following report on the work of this branch of your department for the year ending December 31, 1911:

During the year 1,538 horse and 1,280 cattle brands were allotted, while the transfers numbered 362, changes 32, extracts, searches and estrays 1,408, being a total of 4,620 transactions during the year. The above figures show a decrease of 353 horse and 392 cattle brands, transfers by 162, changes 2, while extracts, searches and estrays have increased by 190, or a total decrease of 719 transactions during the year.

Although these figures show a considerable reduction in the number of transactions compared with the previous year, it should be borne in mind that 1910 was a record year as far as this work was concerned, and if we compare the figures for the year just closed with those of 1909 or previous years, a steady increase will be observed.

The number of letters received during the year referring to the Province of Alberta, was 5,169, while the number of documents despatched was 8,697, a total of 13,866, being a decrease of 2,206.

The following is a statement showing the transactions from 1898 up to December, 1911:

TRANSFERS.	
1899	132
1900	165
1901	222
1902	265
1903	400
1904	402
1905 { N.W. Territories	299
{ Alberta	120
1906 { Saskatchewan	80
{ Alberta	389
1907 { Saskatchewan	72
{ Alberta	430
1908 { Saskatchewan	59
{ Alberta	421
1909 { Saskatchewan	68
{ Alberta	430
1910 { Saskatchewan	65
{ Alberta	524
1911 { Saskatchewan	76
{ Alberta	362

CHANGES.	
1899	..
1900	27
1901	20
1902	26
1903	43
1904	43
1905 { N.W. Territories	32
{ Alberta	7
1906 { Saskatchewan	1
{ Alberta	38
1907 { Saskatchewan	2
{ Alberta	28

1908	{ Saskatchewan..	6
	{ Alberta.....	29
1909	{ Saskatchewan..	4
	{ Alberta.....	33
1910	{ Saskatchewan..	3
	{ Alberta.....	34
1911	{ Saskatchewan..	9
	{ Alberta..	32

SEARCHES AND EXTRACTS.

1899		
1900		35
1901		42
1902		100
1903		144
1904		124
1905	{ N.W. Territories..	81
	{ Alberta..	13
	{ Saskatchewan..	2
1906	{ Alberta..	73
	{ Saskatchewan..	23
1907	{ Alberta..	73
	{ Saskatchewan (including strays)	15
1908	{ Alberta (including strays)...	292
	{ Saskatchewan (including strays)...	349
1909	{ Alberta (including strays)....	783
	{ Saskatchewan (including strays)...	447
1910	{ Alberta (including strays)...	1,218
	{ Saskatchewan (including strays)	257
1911	{ Alberta (including strays)...	1,377
	Number of brands re-allotted in 1898.	3,228

CATTLE BRANDS.

1898		2,111
1899		1,466
1900		1,508
1901		1,689
1902		1,934
1903		2,390
1904		2,034
1905	{ N.W. Territories	1,353
	{ Alberta..	337
	{ Saskatchewan..	70
1906	{ Alberta..	1,894
	{ Saskatchewan..	641
1907	{ Alberta..	1,230
	{ Saskatchewan..	415
1908	{ Alberta...	1,225
	{ Saskatchewan..	438
1909	{ Alberta...	1,326
	{ Saskatchewan..	468
1910	{ Alberta..	1,672
	{ Saskatchewan..	608
1911	{ Alberta...	1,280

HORSE BRANDS.

1898		941
1899		821
1900		886
1901		947
1902		1,234
1903		1,390
1904		1,346
1905	{ N.W. Territories	985
	{ Alberta....	248
	{ Saskatchewan..	89
1906	{ Alberta....	1,361
	{ Saskatchewan..	371
1907	{ Alberta...	1,030

1908	{	Saskatchewan	435
	{	Alberta	1,103
1909	{	Saskatchewan	352
	{	Alberta	1,308
1910	{	Saskatchewan	414
	{	Alberta	1,891
1911	{	Saskatchewan	583
	{	Alberta . .	1,538
Total transactions in		1898	6,280
"	"	1899	2,419
"	"	1900	2,621
"	"	1901	2,920
"	"	1902	3,559
"	"	1903	4,367
"	"	1904	3,949
"	"	1905 { N.W. Territories	2,750
		{ Alberta .	725
"	"	1906 { Saskatchewan	242
		{ Alberta .	3,755
"	"	1907 { Saskatchewan	1,109
		{ Alberta	2,791
"	"	1908 { Saskatchewan	930
		{ Alberta	3,070
"	"	1909 { Saskatchewan	1,211
		{ Alberta	3,880
"	"	1910 { Saskatchewan	1,397
		{ Alberta	5,339
"	"	1911 { Saskatchewan	1,533
		{ Alberta . .	4,620

Yours obediently,

JAMES WILSON,

Recorder of Brands.

7.—REPORT OF THE SUPERINTENDENT OF FAIRS AND INSTITUTES.

SIR,—I beg to present herewith the annual report of the Superintendent of Fairs and Institutes for the year 1911.

EDUCATIONAL WORK.

During the year institute meetings were held at 122 places. A great many of these meetings took place during the month of January when the weather was very cold and in some cases the snow was very deep. There is no doubt that this affected the attendance at several of the meetings. Notwithstanding the fact that the weather was severe and stormy, the attendance compares favourably with that of previous years. The meetings held during the month of February were much more successful than those held during any previous year. Fifteen speakers were employed, two attending each meeting, each speaker taking different subjects. Several night meetings were held but it was found that very few of the farmers attended these meetings, the attendance being largely townspeople. There is no doubt that it is wiser to hold the meetings about 2 o'clock in the afternoon.

A special advertising campaign was inaugurated; a three-inch double-column advertisement was carried in the local paper of the district where each meeting was being held. Posters were sent out to the following:

Secretaries of Agricultural Societies, Local Secretaries of the United Farmers of Alberta, Postmasters, Station Agents, Hotel Proprietors.

To supplement this work a circular letter was sent to a mailing list of 5,000 names calling attention personally to the meetings. In this letter a pamphlet was enclosed outlining the work in connection with the short course schools and institute meetings, giving the place, date, names of speakers and subjects to be discussed. This folder, or pamphlet, is no doubt one of the best methods of advertising such work. The paper used was of good quality and the folder made of such a size and shape that it could be conveniently carried in one's pocket.

It is plainly evident that the institute work is growing from year to year. In the neighbourhood of 6,500 attended the meetings during the past season. The interest manifested at the various meetings as shown by the reports of speakers, goes to prove that the people are anxious for information on agricultural subjects.

INSTITUTE MEETINGS.

The following is a list of meetings addressed by C. E. Lewis, B.S.A., Chief Inspector of Weeds, on noxious weeds, and G.H. Hutton, B.S.A., Superintendent of the Dominion Experimental Farm. Lacombe, on soil culture and crops:

Provost .	January 3
Hardisty .	" 4
Daysland . .	" 5
Sedgewick. . .	" 6

The following list of meetings was addressed by A. W. McIntyre, Esq., Newington, Ont., on hog-raising and dairying, and D. W. Warner, Esq., Edmonton, on soil culture and noxious weeds:

Three Hills	January 5
Sunnyslope	" 6
Neapolis.....	" 7
Knee Hill Valley	" 9
Milnerton	" 10
Huxley	" 11
Trochu	" 12
Curlew	" 13
Mayton	" 14
Bowden.....	" 21
Niddries Bridge..	" 23
Eagle Valley School	" 24
Berrydale School	" 25
Dickson..	" 26
Markerville	" 27
Penhold....	" 28

Mr. McIntyre also spoke at the following places on hog-raising and dairying, A. Gilmault, Esq., acting as interpreter:

Morinville.....	.. January 16
Riviere Qui Barre	.. " 17
Legal...	.. " 18
St. Albert... ..	.. " 19

D. W. Warner, Esq., and L. U. Fowler, Esq., Edmonton, addressed the following meetings: Mr. Fowler spoke on poultry raising; Mr. Warner discussed soil culture and crops.

Burnt Lake	.. January 30
Evarts	.. " 31
Eckville	.. February 1
Rimbey	.. " 3
Bentley	.. " 4
Castor	.. " 7
Gadsby	.. " 8
Zenith...	.. " 9
Red Willow	.. " 10
Stettler	.. " 11
Erskine	.. " 13
Content	.. " 14
Alix	.. " 15
Clive..	.. " 16
Earlville	.. " 17

A. W. Foley, Esq., Poultry Superintendent for the province, and E. J. Cook, Esq., of Lethbridge, addressed the following meetings on practical poultry raising:

Conjuring Creek	.. January 16
Calmar... ..	.. " 17
Beaumont	.. " 18
Ellerslie	.. " 19
Namao....	.. " 20
Bon Accord.	.. " 21
Tofield. ....	.. " 23
Ryley	.. " 24
Holden	.. " 25
Viking	.. " 26
Irma.....	.. " 27
Wainwright	.. " 28
Wabamun	.. " 30
Rexboro....	.. " 31

Stony Plain	February 1
Mewassin	" 2
Inga.....	" 3
Spruce Grove Centre.....	" 4

W. F. Stevens, Esq., Live Stock Commissioner, discussed swine growing and soil culture and D. N. McIntyre, Esq., Meadows, Man., spoke on preservation of humus, and feeding and care of dairy cattle, at the following meetings:

Coleridge.	January 19
Irvine....	" 20
Josephsburg	" 21
Taber.....	" 23
Cardston	" 24
Glenwood..	" 25
Mountain View	" 26
Leavitt	" 27
Kimball	" 28
Magrath	" 30
Coaldale	" 31

Messrs. D. N. McIntyre and E. J. Cook addressed the following meetings on soil cultivation and poultry raising respectively:

Leduc	February 2
Millet...	" 3
Spring Lake	" 6
Hastings Coulee	" 7
Grainland	" 8
Flagstaff	" 9
Merna	" 10
Killam	" 11
Prague	" 13
Wavy Lake	" 14
Strome	" 15
Bawlf	" 16
Ohaton	" 17
Camrose.	" 18

The following meetings were addressed by W. H. Fairfield, Esq., Superintendent of the Dominion Experimental Farm, Lethbridge, on soil culture and alfalfa, and E. H. Malcolm, Esq., Killam, on noxious weeds:

Carmangay	February 13
Cleaverville	" 14
Barons	" 15
Noble	" 16
Monarch.	" 17
Warner	" 18

S. S. Stansell, Esq., Stony Plain, and A. P. Stevenson, Esq., Morden, Man., spoke at the following meetings on birds and their relation to agriculture and forestry:

Strathmore ..	February 6
Cochrane.	" 7
Priddis	" 8
De Winton	" 9
Okotoks..	" 10
High River	" 11
Cayley.	" 13
Macleod.	" 14
Granum.	" 15
Claresholm	" 16
Stavely.	" 17

Nanton.....	February 18
Airdrie.....	" 20
Crossfield.....	" 21
Carstairs ..	" 22
Didsbury..	" 23
Bowden ..	" 24
Penhold ..	" 25
Innisfail...	" 27
Lacombe..	" 28
Ponoka...	March 1
Wetaskiwin	" 2
Leduc.....	" 3
Strathcona.	" 4

The following meetings were addressed by W. F. Stevens, Esq., on swine growing, and D. McKercher, Esq., Olds, on how to treat ordinary diseases of farm stock:

Lloydminster.	February 13
Rivercourse...	" 14
Kitscoty ..	" 15
Tring..	" 16
Islay.....	" 17
Manville..	" 18
Chailey...	" 20
Minburn ..	" 21
Ranfurly..	" 22
Vermilion.	" 23

SHORT COURSE WORK.

Short course schools were held as follows:

Strathmore	February 6th to February 11th.
Macleod. .	February 13th to February 25th.
Vermilion.	February 20th to March 4th.
Innisfail	February 27th to March 11th.

The programme of addresses at these schools was of a very similar nature to that given in previous years. It is interesting to note the increase in attendance from year to year. When these schools were first started the attendance ran from 40 to 60. During the past winter the attendance reached a total of 460 at one of the sessions. Each course lasted two weeks; the first week was devoted entirely to live stock, the second to a study of grains, grasses, noxious weeds, poultry, dairying and horticulture.

A large circular tent fitted with circus seats and stoves was used for live stock work. Three car loads of pure bred stock were kindly loaned for instruction work by the following breeders:

STOCK	OWNER	ADDRESS
1 Clydesdale stallion .	H. McIntosh	Macleod.
1 Clydesdale stallion.	John Richards .	Red Deer.
2 Clydesdale mares.	Bryce Wright	De Winton.
2 Suffolk stallions.	G. Jaques....	Lamerton.
1 Belgian stallion...	G. T. Kidd.	Strome.
2 Percheron stallions..	G. Lane ..	Pekisko.
2 Percheron mares..	G. Lane ..	Pekisko.
2 Hereford cows	G. H. Cresswell	Edmonton.
2 Hereford bulls..	G. H. Cresswell.	Edmonton.
1 Shorthorn bull	Bryce Wright	De Winton.
1 Shorthorn cow .	Bryce Wright	De Winton.
1 Shorthorn cow..	J. H. Melick	Edmonton.
1 Shorthorn bull .	J. H. Melick	Edmonton.

2 Angus cows	L. Hutehinson.	Duhamel.
2 Ayreshire cows	A. H. Trimble	Red Deer.
2 Ayreshire bulls	A. H. Trimble	Red Deer.
3 Holstein cows	Prof. Elliott, C.P.R. Demon-	
	stration Farm	Strathmore.
3 Oxford sheep.	Bryce Wright	De Winton.
3 Shropshire sheep	Jno. A. Turner.	Calgary.

This stock was shipped from place to place and used in the class-room for demonstration purposes.

A short practical course was given in judging and grading the different grains grown in the province. The more important varieties in each class were studied, their qualifications discussed, and especial emphasis placed upon their adaptability for growth within the province. Samples of noxious weeds and seeds were exhibited, their habits, and the methods of eradication thoroughly discussed.

Lectures in dairying, the breeding, hatching, rearing, housing of poultry and egg production formed a part of this course.

A new feature in connection with the short course schools which created a great deal of interest, was the judging competition. This was held at the close of each school, the students competing in the judging of live stock and grain. The four who received the highest total number of marks in this competition had their expenses paid to a central point where they competed as teams, in a grand championship competition. The final contest was held at Innisfail on March 10. The following is the order in which the teams stood:

1, Strathmore; 2, Macleod; 3, Innisfail, 4, Vermilion.

The department offered four silver cups to be presented to the individuals composing the winning team; four illustrated books on live stock were presented to the individuals who stood highest in the competition outside the members of the winning team.

A great deal of credit must be given to the agricultural societies and citizens in the different towns where these schools were held. An officer of the department interviewed the members of the boards of trade and agricultural societies in the different towns outlining the work in connection with the short courses, and in each case was assured of the hearty co-operation of the people of the district. The thanks of the department is due to those who assisted in making the various short courses a success, and is also due to the officials of the C.P.R., and particularly to Professor Elliott for his untiring efforts in connection with the short course at Strathmore.

The following is a list of speakers who composed the staff of the short course schools:

George Harecourt, B.S.A., Deputy Minister of Agriculture, Edmonton.
W. F. Stevens, Live Stock Commissioner, Edmonton.
C. E. Lewis, B.A., B.S.A., Superintendent Fairs and Institutes, Edmonton.
A. W. Foley, Poultry Superintendent, Edmonton.
Bryce Wright, De Winton.
A. W. McIntyre, Newington, Ont.
C. Marker, Dairy Commissioner, Calgary.
G. H. Hutton, B.S.A., Superintendent Experimental Farm, Lacombe.
W. D. Breckon, B.S.A., Superintendent Demonstration Farm, Stoney Plain.
E. H. Malcolm, Killam.
G. W. Scott, Creamery Inspector, Innisfail.
J. H. Pearson, Creamery Inspector, Red Deer.
A. Atkinson, B.S.A., Professor of Agronomy, Agricultural College, Pozeman, Montana.
W. J. Elliott, B.S.A., Superintendent C.P.R. Demonstration Farm, Strathmore.
J. T. Worthington, Strathmore.

FAIRS.

Increasing interest is being manifested throughout Alberta in agricultural fairs. A large number of the societies are improving their grounds and buildings; the number and quality of the exhibits also show the progress that is being made by many of the fairs.

Every society should endeavour to make their fairs educational, and keep this feature of the work to the front. No pains should be spared to provide good accommodations for spectators to watch the judging. If a good grand stand were placed at the side of the judging ring a much larger number would avail themselves of the opportunity of watching the work of the judges. When the decisions are given on a class they should be arranged in order of merit so as to give the spectators a chance to see the placing to advantage. The department has supplied judges for the placing of awards on all classes of horses, cattle, sheep and swine. The entries in live stock at some of the fairs have become so large that it will be necessary to supply two judges for cattle, and two judges for horses.

The following is a list of the fairs held during 1911, together with the dates, names and addresses of the judges:

FAIR	DATE	JUDGE FOR HORSES	JUDGE FOR CATTLE, SHEEP AND SWINE.
Crossfield .	June 22nd	T. Rawlinson, Wimborne.	W. H. Hammer, Olds.
Calgary .	June 20 to July 7	"	"
Okotoks .	July 11-12	Dr. Campbell, Priddis...	"
Innisfail .	July 13-14	T. Rawlinson, Wimborne .	"
Macleod .	Aug. 2-3-4	D. McKercher, Olds... ..	"
Grannum .	Aug. 7-8...	"	"
Claresholm	Aug. 9-10 .	"	"
Stony Plain	Aug. 11-12	"	"
Edmonton	Aug. 15-19	Neil Smith, Brampton, Ont. (Clydesdales).	John Gardhouse, Highfield, Ont. (Beef Cattle).
		C. J. Arnott, Ames, Iowa (Percherons & Belgians)	A. W. McIntyre, Newington, Ont. (Dairy Cattle, Sheep and Swine)
		W. J. Stark, Toronto, Ont. (Light horses).	
Rexboro .	Aug. 19 .	Dr. D. McKercher, Olds .	W. H. Hammer, Olds
Wabamun .	Aug. 22 .	"	"
Lethbridge	Aug. 22-25.	Neil Smith, Brampton, Ont. (Clydesdales).	A. W. McIntyre, Newington, Ont. (Beef Cattle, Sheep and Swine)
		Wayne Dinsmore, Chicago (Percherons & Belgians).	C. J. Arnott, Ames, Iowa, (Dairy Cattle)
Medicine Hat .	Aug. 29 to Sept 1	Neil Smith (heavy) . . . W. R. Lowes, Edmonton, (light)	A. W. McIntyre
Trochu .	Sept. 1.	T. Rawlinson . . .	W. H. Hammer
Entwistle .	Sept. 12.	Neil Smith . . .	"
St. Albert .	Sept. 13.	"	"
Ft. Saskatchewan	Sept. 14.	"	"
Vernilion .	Sept. 19	"	"
Kitscoty .	Sept. 27.	T. Rawlinson . .	"
Lloydminster .	Sept. 29	"	"
Innisfree .	Oct. 3-4	"	"
Vergreville . .	Oct. 5-6	"	"
Irma .	Sept. 22.	Neil Smith.	W. R. Winslow, Lacombe
Viking . . .	Sept. 26	"	"
Holden . . .	Sept. 28.	"	"
Tofield . . .	Sept. 29	"	"
Strome . . .	Sept. 8	"	A. W. McIntyre
Pincher Creek	Sept. 12	D. McKercher.	"
Nanton . . .	Sept. 13-14 . .	"	"
Stavelv . . .	Oct. 6.	"	W. S. Jacobs, Munson.
Raymond . . .	Sept. 19-20. . .	"	A. W. McIntyre
Magrath . . .	Sept. 22-23. . .	"	"
Cardston . . .	Sept. 26-27 . .	"	"
Taber	Sept. 28-29. . .	"	"
Rawdonville..	Oct. 3.	"	"
Langdon . . .	Oct. 4-5. . . .	"	"
Warner . . .	Sept. 18.	"	"
Leduc . . .	Sept. 12. . .	W. R. Lowes. . .	Jas. Hunter, Innisfree.
Cochrane . . .	Sept. 13.	"	"
Sedgewick . .	Sept. 15. . .	Dr. A. B. Campbell, Priddis	T. H. Tinney, Medicine Hat

FAIR	DATE	JUDGE FOR HORSES	JUDGE FOR CATTLE, SHEEP AND SWINE.
Three Hills	Sept. 19	Dr. A. B. Campbell, Priddis	T. H. Tinney, Medicine Hat
Milnerton.	Sept. 20.	"	"
Olds.	Oct. 10-11 . . .	"	W. R. Winslow.
Wetaskiwin .	Sept. 26-27 . . .	"	"
Alix.	Sept. 27. . . .	"	T. H. Tinney
Lacombe . . .	Sept. 28-29 . . .	"	"
Ponoka. . . .	Oct. 3-4	"	"
Camrose . . .	Oct. 5-6	"	"
Bowden	Oct. 3	Neil Smith.	W. R. Winslow.
Didsbury . . .	Oct. 4	"	"
Priddis	Oct. 5	"	"
Gleichen. . . .	Oct. 5-6	"	"
Castor.	Sept. 25-26 . . .	W. R. Lowes. . . .	Jas. Hunter.
Stettler. . . .	Sept. 28-29 . . .	"	"
Carmangay . . .	Sept. 14-15. . . .	"	"
Hardisty. . . .	Sept. 27.	"	"
Provost.	Oct. 5	"	"
Mid-Pembina. . .	Sept. 16.	"	"
Paddle River. .	Sept. 20	"	"
Edgerton.	Oct. 4.	"	"
High River. . . .	Oct. 12-13. . . .	"	"
Lesser Slave Lake	Oct. 5-6-7.	"	"

During the past year eleven new agricultural societies have been organized as follows:

Mid-Pembina Agricultural Society	Dunstable.
Acme Agricultural Society. . . .	Acme.
Wainwright Agricultural Society .	Wainwright.
Munson Agricultural Society	Munson.
Hardisty Agricultural Society.	Hardisty.
Warner Agricultural Society. . . .	Warner.
North Alberta Agricultural Society	Kinnoull.
Legal Agricultural Society.	Legal.
Paddle River Agricultural Society.	Mellowdale.
Elk Point Agricultural Society.	Elk Point.
Edgerton Agricultural Society.	Edgerton.

The Ordinance at present makes it imperative for each society to hold two institute meetings and I do not think it would be asking too much to require each society to hold at least one of these meetings without government aid, at some outlying point. By so doing they will be able to create an interest in the work an agricultural society should be endeavouring to accomplish throughout the surrounding territory. Good results should be obtained such as increasing the number and quality of the exhibits at the fair. The following is a complete list of the agricultural societies and exhibition associations in Alberta:

SOCIETY	SECRETARY	ADDRESS
Airdrie	J. M. Windsor	Airdrie.
Alix	G. H. Darlow	Alix.
Acme. . . .	W. Bannerman	Acme.
Bowden	H. E. Shenfield	Bowden.
Cardston	Jos. Card	Cardston.
Claresholm District	J. R. Watt	Claresholm.
Camrose	Jas. Pike	Camrose.
Crossfield.	G. W. Boyce	Crossfield.
Cochrane District	J. E. Laird	Cochrane.
Castor. . . .	Geo. Auxier	Castor.
Carmangay. . . .	A. F. Wilson	Carmangay.
Deseret (Magrath)	Benj. Matkin.	Magrath.
Didsbury	H. B. Atkins. .	Didsbury.
Daysland.	A. A. P. McDowell	Daysland.
Entwistle and Pembina	S. W. Morris	Entwistle.
Elk Point. . . .	E. L. Arnett.	Elk Point.

SOCIETY	SECRETARY	ADDRESS
Edgerton.	Wm. Grieve.	Edgerton.
Fort Saskatchewan	G. T. Montgomery	Fort Saskatchewan.
Gleichen.	W. J. Burr	Gleichen.
Granum.	James Blair.	Granum.
Grand Prairie	David H. Axon.	Beaver Lodge.
High River	Harry Nelson	High River.
Holden	Wm. E. Hayes	Holden.
Innisfail	A. Aspinall	Innisfail.
Irvine.	L. R. Harris	Irvine.
Innisfree	J. H. Montgomery	Innisfree.
Irma	Chas. Swailes.	Irma.
Kitseoty	E. C. McPhee	Kitseoty.
Lacombe	Jas. Gourlay	Lacombe.
Lethbridge and District	J. W. McNicol	Lethbridge.
Leduc.	C. W. Carroll	Leduc.
Legal.	J. B. Cote	Legal.
Lloydminster	H. H. Huxley.	Lloydminster.
Langdon and Bow River.	Omar Botsford	Langdon.
Lesser Slave Lake.	Geo. E. Martin	High Prairie.
Macleod.	H. H. Hilliard	Macleod.
Medicine Hat.	H. H. Hassard	Medicine Hat.
Mannville.	R. B. Hanning	Mannville.
Millerton.	Ernest W. Meers	Wimbourne.
Mid-Pembina	H. S. McCowan.	Heaton Moor.
Nanton.	Wm. Robertson.	Nanton.
Munson.	W. S. Jacobs.	Munson.
Olds	R. Bowman Campbell	Olds.
Okotoks.	E. A. Hayes.	Okotoks.
Pincher Creek.	J. W. Harwood	Pincher Creek.
Ponoka.	T. W. Hutchinson.	Ponoka.
Priddis and Millarville.	Richard Knights	Millarville.
Provost and District.	Jas. G. McKay	Provost.
Paddle River	D. B. O'Brien.	Paddle River.
Raymond	F. R. Holt.	Raymond.
Red Deer	A. D. McKenzie.	Red Deer.
Rexboro and District.	Geo. Merryweather	Rexboro.
Swalwell.	A. B. Claypool	Swalwell.
St. Albert	Omar St. Germain.	Morinville.
Stettler.	David Mitchell	Stettler.
Sedgewick.	M. Harper.	Sedgewick.
Stavely.	R. A. Hopkins.	Stavely.
Strome-Killam	W. E. G. Hunter.	Strome.
Stony Plain	T. P. Lindley	Stony Plain.
Strathmore	Frank T. McElhoes.	Strathmore.
Taber.	Theodore A. Sundall	Taber.
Three Hills	C. P. McDonough	Three Hills.
Tofield	R. N. Whillans	Tofield.
Trochu.	L. E. Eckenfelder	Trochu.
Vermilion Valley and Beaver Lake	Frank Wilson	Vegreville.
Vermilion	H. A. Taylor	Vermilion.
Viking and Birch Lake.	C. S. Councilman	Viking.
Wetaskiwin	Chas. D. Enman.	Wetaskiwin.
Wabamun	G. C. Laight	Wabamun.
Warner.	J. D. Dall	Warner.
Wainwright.	P. E. Ross	Wainwright.

EXHIBITION ASSOCIATIONS.

Inter-Western Pacific Exhibition Co. (Alberta Provincial).
Edmonton Industrial Exhibition Association.

POULTRY SHOWS.

Poultry shows have been held by the following societies and associations:

Taber Agricultural Society, Pincher Creek Agricultural Society, Calgary Poultry and Pet Stock Association, Medicine Hat Poultry and Pet Stock Association, Edmonton Poultry and Pet Stock Association, Magrath Agricultural Society, Lethbridge Poultry and Pet Stock Association.

FIELD GRAIN COMPETITION.

These competitions have been instrumental in making the farmers realize the importance of sowing good clean seed. Since they have been introduced, great improvement has been made by the competitors in regard to purity of variety, and freedom from other kinds of grain and weeds.

The following is a list of societies that held field grain competitions and the date thereof:

Bowden	August 22.
Cardston	August 19.
Carmangay	August 15-16-17.
Claresholm	September 1.
Eastern Alberta	August 11-12.
Innisfail	August 14.
Kitscoty	August 15.
Lacombe	August 24.
Leduc	August 16.
Lethbridge	July 26.
Macleod	July 26.
Medicine Hat	July 27.
Sedgewick	August 12.
Stony Plain	August 18.
Trochu	August 12.
Vermilion Valley and Beaver Lake	August 15.
Viking and Birch Lake	August 19.

DEPARTMENT OF AGRICULTURE

FINANCIAL STATEMENT.

SOCIETY	Balance on hand from 1910	Mis- cellaneous Receipts	Government Grant paid 1911	Total Receipts	Total Expenditure	Balance on hand	Assets	Liabilities
1 Cardston...	\$21 50	\$3,061.76	\$1,122 33	\$4,184 09	\$4,184 09	\$.	\$4,108 94	\$2,947 07
2 Magrath	36 83	3,122 28	1,347 00	4,469 28	4,400 87	68 41	5 068 41	4,500 00
3 Didsbury	103 71	689 03	660 87	1,349 90	1,341 75	8 15	8 15	
4 Innisfail	3 75	5,605 06	2,005 33	7,610 39	7,610 39		6,886 08	3,487 93
5 Lacombe	141 21	4,796 98	1,017 17	5,814 15	5,792 15	22 00	12,303 19	3,585 81
6 Lethbridge		19,205 36	2,287 66	21,493 02	21,493 02			
7 Macleod	211 30	14,053 61	1,052 99	15,106 60	15,047 93	58 67	2,066 33	4,060 00
8 Medicine Hat		44,280 97	1,338 33	45,619 30	45,619 30		35,539 85	20,786 07
9 Olds	30 29	1,302 27	597 17	1,899 44	1,899 44		4,400 00	590 48
10 Pincher Creek	4 09	1,065 72	544 83	1,610 55	1,610 55		6,452 75	2,666 27
11 Ponoka	13 15	2,305 35	1,202 10	3,507 45	3,507 45		900 00	1,269 50
12 Raymond	92 56	3,947 98	1,645 80	5,593 78	5,593 78		2,417 07	2,671 97
14 Okotoks	46 57	866 82	758 66	1,625 48	1,606 95	18 53	1,700 00	706 40
15 Vegreville		1,867 09	1,013 00	2,880 09	2,816 14	63 95	4,586 95	3,382 65
16 Wetaskiwin	188 09	2,975 32	998 66	3,973 98	3,973 98		2,818 15	1,300 00
17 Leduc		2,822 56	963 83	3,786 39	3,786 39		1,432 01	1,432 01
18 Nanton	478 82	1,122 15	40 00	1,162 15	1,032 80	129 35	129 35	
19 Vermilion	9 44	649 54	978 10	1,627 64	1,627 64		1,113 10	1,424 01
20 High River		2,472 98	642 33	3,115 31	3,115 31		61 54	265 00
21 Priddis and Millarville	3 77	541 67	319 67	861 34	799 80	61 54	4 20	389 80
22 Viking		924 20	472 50	1,396 70	1,392 50	4 20	22 29	325 00
23 St. Albert	5 36	683 16	379 83	1,062 29	1,040 70	22 29		1,570 39
25 Stettler		2,222 24	392 66	2,614 90	2,614 90		5,500 00	1,560 00
26 Daysland		1,124 65	494 96	1,619 61	1,616 70	2 91	1,502 91	1,041 79
27 Claresholm		2,032 89	600 66	2,633 55	2,633 55			1,041 79
28 Milnerton	21 20	1,400 88	602 67	2,003 55	1,877 45	126 10	441 10	725 00
30 Taber	95 00	909 50	659 33	1,568 83	1,451 55	117 28	151 28	200 00
31 Innisfree	1 15	979 00	312 05	1,291 05	1,291 05		47 10	453 45
32 Sedgewick	\$112 58	\$4,510 33	\$914 33	\$5,424 66	\$5,396 90	\$27 76	\$4,291 94	\$2,443 00
33 Alx		1 002 75	644 75	1,647 50	1,635 16	12 34	42 34	634 90
34 Lloydminster	1 90	4,430 22	946 66	5,376 88	5,376 88		77 14	1,133 00

	19 57	1,963 84	794 96	2,758 80	2,758 80	2,758 80	7,300 00	825.00
35 Camrose.	275 34	2,169 30	673 46	2,842 76	2,842 76	2,842 76	7,300 00	825.00
36 Gleichen	6 65	588 40	548 23	1,136 63	1,125 65	1,125 65	23 98	150.00
37 Three Hills		439 00	530 33	1,049 33	1,019 81	1,019 81	29 52	250.00
38 Irna.....		511 95	341 33	853 28	826 51	826 51	3,076 77	2,038 75
39 Crossfield		954 13	481 49	1,435 62	1,435 62	1,435 62	25 00	491.58
40 Bowden...	18 25	1,142 57	433 33	1,455 90	1,531 96	1,531 96	64 69	590 00
43 Wabamun		534 56	246 00	780 56	733 08	733 08	48 48	711.10
44 Rexboro.	8 60	1,573 95	638 46	2,212 41	2,206 65	2,206 65	190 76	174 00
45 Cochrane	89 69	503 06	104 00	607 06	607 06	607 06	104 70	4 25
46 Holden.	75 50	772 25	99 00	871 25	841 55	841 55	2,866 21	671.31
47 Stavely		2,094 97	310 33	3,405 30	3,405 30	3,405 30	90 00	1,010 78
48 Tofield	23 21	1,837 49	431 66	2,269 15	2,269 15	2,269 15	85 29	18.75
49 Strome-Killam	42 29	1,387 35	...	1,387 35	1,387 35	1,387 35	26.83	600 00
50 Trochu....	53 95	811 50	546 17	1,349 67	1,264 38	1,264 38	2,505 17	646.00
51 Fort Saskatchewan	48 50	882 48	...	882 48	855 65	855 65	64 58	464 00
52 Granum.....		1,275 03	60 00	1,335 03	1,335 03	1,335 03	67.65	881 25
53 Langdon and Bow River		433 90	407 67	841 57	722 90	722 90	123 77	150 00
54 Grand Prairie...		2,458 70	678 50	3,137 20	3,137 20	3,137 20	350 00	895.00
55 Castor.....	33 65	622 25	328 83	951 08	886 50	886 50	267 50	889 85
56 Kilsnoy	90 70	1,363 95	440 33	1,804 28	1,804 20	1,804 20	227 75	155 70
57 Stony Plain	109 55	262 35	225 30	287 65	420 00	420 00	255 17	312.27
58 High Prairie	106 95	2,279 10	58 00	2,337 10	2,337 10	2,337 10	97 73	87 73
59 Swallowell...		678 24	81 00	759 24	756 87	756 87	85 88	85 88
60 Entwistle		1,358 60	1,358 60	1,358 60	1,358 60	1,358 60	61 00	61 00
61 Carmanagay		1,479 70	1,479 70	1,479 70	1,479 70	1,479 70	54 35	54 35
62 Provost.		345 21	245 21	245 21	245 21	245 21	6 00	6 00
64 Mid-Pembina		438 55	438 55	438 55	438 55	438 55	49 00	49 00
65 Hardisty...		567 04	567 04	567 04	567 04	567 04	10 00	10 00
66 Paddle River		654 25	654 25	654 25	654 25	654 25	60 00	60 00
68 Warner....		61 00	61 00	61 00	61 00	61 00	...	...
69 Elk Point		58 00	58 00	58 00	58 00	58 00	...	...
71 North Alberta		624 80	624 80	624 80	624 80	624 80	...	...
72 Edgerton...		52 00	52 00	52 00	52 00	52 00	...	...
73 Munson							...	...

FINANCIAL STATEMENT—EXHIBITION ASSOCIATIONS.

610—100, Edmonton.
 610—99, Calgary.

12,169 42 81,647 53 8,000 00 89,647 53 86,963 87 2,683 66 13,590 58
 610—99, Calgary.

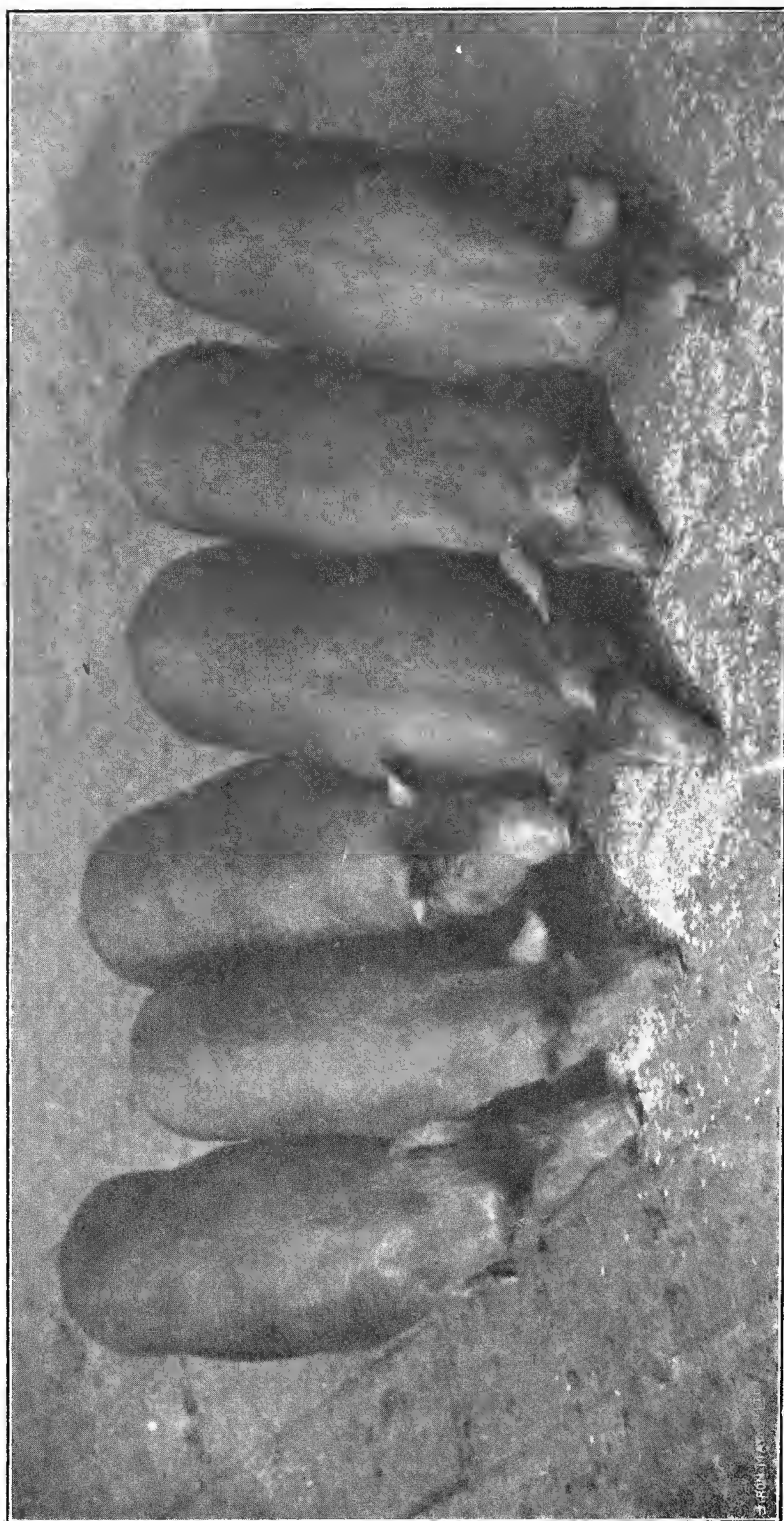
AGRICULTURAL SOCIETIES STATEMENT.

SOCIETY	DATE OF EXHIBITION	No. of Entries	Amount paid in prizes for Sports	Amount paid in prizes Field Grain Competition	Amount paid in Prizes for Stallion Show	Good Farm Competition
1 Cardston	September 26-27	1,023	\$52 20	\$135 00		
2 Magrath	September 22-23	1,216				
3 Didsbury	October 4	639				
4 Innisfail	July 13-14	1,111	122 00	150 00		
5 Lacombe	September 28-29	639		96 00		
6 Lethbridge	August 22-25	2,333	2,041 50	265 00		
7 Macleod	August 2-3-4	929	1,822 75	100 00		
8 Medicine Hat	August 29 to September 1	1,390	3,152 75	120 00	\$512 00	
9 Olds	October 10-11	1,255				
10 Pincher Creek	September 12	705	50 60		170 00	
11 Ponoka	October 3-4	587	223 50			
12 Raymond	September 19-20	1,073	347 50			
14 Okotoks	July 11-12	489			136 00	
15 Vegreville	October 5-6	470		100 00	68 00	
16 Wetaskiwin	September 26-27	889	167 50			\$100 00
17 Leduc	September 12	856	126 00	80 00		
18 Nanton	September 13-14	329	243 00			
19 Vermilion	September 19	468	57 00			
20 High River	October 12-13	1,119	529 29		211 00	
21 Priddis and Millarville	October 5	425				
22 Viking	October 26	501	3 00	100 00	99 00	
23 St. Albert	September 13	241				
25 Stettler	September 28-29	304				
26 Daysland	September 19	575	207 07			
27 Claresholm	August 9-10	990	150 00	100 00		
28 Minerton	September 20	666	54 00	50 00		
30 Taber	September 28-29	367	100 00			

31|Innisfree....	October 3-4..	484	24.00			
32|Sedgewick	September 15.	627	80.00	150.00		
33|Alix	September 27	335				
34|Lloydminster	September 29.	906		100.00		
35|Canrose	October 5-6	730	163.00			
36|Gleichen..	October 5-6	308	924.05			
37|Three Hills	September 19..	491				
38|Irma.....	September 22..	610				
39|Crossfield	June 22.....	273				
41|Bowden	October 3.....	430		115.00		
43|Wabamun	August 22....	338	176.00			
44|Rexboro..	August 19....	314	33.75			
45|Holden	September 28.					
46|Cochrane	September 13					108.00
47|Stavely	October 6.....	755	163.50			
48|Tofield	September 29	339				
49|Killam...	September 8....	578	108.00			
50|Trochu...	September 1....	575	25.00			
51|Fort Saskatchewan...	September 14	400	80.00	20.00		
52|Granum	September 14	413	200.00			
53|Langdon	August 7-8....	658				
54|Grand Prairie	October 4-5....	360	133.40			
55|Castor	September 28-29	223	175.00			
56|Kitcooty	September 25-26	492	585.00			
57|Stony Plain	September 27	412		100.00		
58|High Prairie	August 11-12	419	97.50	140.00		
59|Swalwell	....	73				
60|Entwistle	October 3.....	335				
61|Carnangay	September 12..	472	50.80			
62|Provost	September 14-15	554	125.75	150.00		
	October 5.....	447	312.00	100.00		

AGRICULTURAL SOCIETIES STATEMENT.—Continued.

SOCIETY	DATE OF EXHIBITION	No. of Entries	Amount paid in Prizes for Sports	Amount paid in Prizes Field Grain Competition	Amount paid in Prizes for Stallion Show	Good Farm Competition
64|Mid-Pembina	September 22	159	35 00			
65|Hardisty . . .	September 27	122				
66|Paddle River	Sept. 20 . .	230	38 50			
68|Warner . . .	September 18	247				
69|Elk Point . . .						
71|North Alberta						
72|Edgerton . .		527	19 00			
73|Munson	October 4					
EXHIBITION ASSOCIATIONS.						
610—100, Edmonton	August 15-19 . .	3,545	13,202 95		655 00	
610—99, Calgary.	June 20 to July 7	5,962	7,742 50			



ALBERTA GROWS IDEAL BACON HOGS.

SEED FAIRS.

These fairs are stimulating a greater interest in the production and use of pure seed, and are doing much to increase the yield and quality of the grain crop in the province. The names of the winners in the various classes are published thus informing the farmers where good seed can be obtained.

The following societies held seed grain fairs:

Alix	November 22.
Cardston	November 22.
Bowden	February 1.
Camrose	January 28.
Daysland	January 24.
Magrath	November 23.
Didsbury	January 30.
Gleichen	December 2.
Innisfail	February 2.
Innisfree	November 25.
Irma	November 29.
Lacombe	February 7.
Lloydminster	January 19.
Macleod	November 26.
Medicine Hat	December 1.
Milnerton	January 31.
Olds	January 31.
Pincher Creek	November 28.
Provost	January 27.
Raymond	November 24.
Sedgewick	January 26.
Stavely	January 20.
Stony Plain	December 5.
Strome-Killam	January 25.
Taber	November 29.
Three Hills	December 7.
Tofield	December 2.
Vegreville	November 26.
Vermilion	November 24.
Viking	November 30.
Okotoks	February 11.
Strathmore	December 3.

STALLION SHOWS.

Spring stallion shows were held at the following places:

Calgary	April 18 to 21.
Edmonton	April 26 and 27.
Medicine Hat	April 6 and 7.
Cochrane	April 15.
Vegreville	April 19.
Pincher Creek	April 22, 24-25.
Camrose	April 21.
Macleod	April 25-26-27.
High River	April 14.
Viking	April 15.
Okotoks	April 15.

PROVINCIAL SEED FAIR

During the year twenty-seven seed fairs were held at various points in the province. The grain exhibited at each of these fairs was as a rule of good quality showing a decided improvement over the previous year. An institute meeting was held at the close of each fair when the judges discussed the various samples exhibited, giving the reasons for the placings and also dealt with soil cultivation and the eradication of noxious weeds. These fairs were arranged in series and all completed before the provincial fair was held, thus giving a chance to advertise the provincial one at each of the local fairs and bringing forward the prize winning samples for the final contest.

The provincial seed fair was held in Lacombe in the old Public School building on February 8, 9 and 10. The seats were removed from two rooms and railings put up which displayed the samples of grain in a very attractive manner. The number of entries was not quite so large as the previous year but the quality of the grain was well up to the standard. The following is the prize list:

CLASS.	1st	2nd	3rd	4th	5th
1. Winter wheat, any hard variety	\$20	\$15	\$12	\$8	\$5
2. Winter wheat, any soft variety	15	12	8	5	
3. Spring wheat, Red Fife	18	14	10	6	4
4. Spring wheat, any other good milling variety	18	14	10	6	4
5. Oats, Banner, Ligowo, Swedish Milling, Dauberney, Orloff, and other named varieties of the long slim type of grain	20	15	12	8	5
6. Oats, Abundance, Waverley, Newmarket, Silver Mine, Welcome, and other named varieties of medium length and plumpness	20	15	12	8	5
7. Oats, Sensation, New Century, Dodd's White Tartar King, Storm King, and other named varieties of the short plump type of grain	18	14	10	6	4
8. Barley, six-rowed	15	10	5		
9. Barley, two-rowed	15	10	5		
10. Field Peas	12	8	5		
11. Flax seed	12	8	5		
12. Timothy seed	12	8	5		
13. Brome grass seed.	12	8	5		
14. Rye grass seed	12	8	5		
15. Red clover seed	12	8	5		
16. Alsike clover seed	12	8	5		
17. Alfalfa seed	12	8	5		
18. Judging wheat	10	8	5	3	
19. Judging oats	10	8	5	3	
20. Identification of weed seeds	8	5	3		

In addition to this there were six special prizes consisting of silver trophies valued at \$100.00 each, all of which remain in competition until won by one exhibitor, three times. The following is a list of the silver trophies:

Class 21.—Best five bushels of spring wheat, silver trophy, valued at \$100.00, donated by the publishers of the Farm Crops Magazine, Winnipeg.

Class 22.—Best five bushels of Alberta Red wheat, silver trophy, valued at \$100.00, donated by the Alberta Pacific Elevator Company of Calgary.

Class 23.—Best five bushels of milling oats, silver trophy, valued at \$100.00, donated by the Calgary and Stratheona branches of the Brackman-Ker Milling Company.

Class 24.—Best five bushels of six-rowed barley, silver trophy, valued at \$100.00, donated by the Calgary Brewing and Malting Company of Calgary.

Class 25.—Best two bushels of two-rowed barley, sterling silver trophy, valued at \$125.00, donated by the Canadian Pacific Railway Company. In addition to

the trophy, the company offers a cash prize of \$15.00 to the winner and \$10.00 as a second prize. A brewing test will be necessary in making awards in this class. The company reserves the right to purchase winning exhibits at market prices.

Class 26.—Best five bushels of Garton's regenerated abundance oats, solid sterling silver trophy, valued at \$100.00, donated by the Garton Pedigree Seed Company of Winnipeg. The oats to be grown from seed obtained from this company the spring preceding the Alberta Provincial Seed Fair, and the trophy to become the property of the person first winning it three times.

PRIZE WINNERS.

Class 1.

1st.	W. J. Glass	Macleod.	\$20.00
2nd.	Alex Woolley	Norton.	15.00
3rd.	A. R. Bennett.	Magrath.	12.00
4th.	C. A. Hodgins.	Wellsdale.	8.00
5th.	James McNicol	Blackfalds.	5.00

Class 2.

1st.	C. C. Williams.	Blackfalds.	15.00
2nd.	J. C. Vaughan.	Lacombe.	12.00
3rd.	J. McMinn.	Lacombe.	8.00

Class 3.

1st.	A. J. W. Scott.	Manville.	18.00
2nd.	M. Sanford.	Manville.	14.00
3rd.	Shield Bros	Macleod.	10.00
4th.	W. J. Glass	Sedgewick	6.00
5th.	W. I. Sharp.	Sedgewick.	4.00

Class 4.

1st.	C. T. Ashmore.	Knee Hill Valley.	18.00
2nd.	J. M. Loree	Innisfree.	14.00
3rd.	G. J. Estell.	Alix.	10.00
4th.	J. A. White	Macleod.	6.00
5th.	C. A. Hodgins.	Wellsdale.	4.00

Class 5.

1st.	E. E. Swift	Magin.	20.00
2nd.	Jos. Nolte.	Stettler.	15.00
3rd.	J. H. Sorum	Alix.	12.00
4th.	E. W. Simpson.	Lacombe.	8.00
5th.	F. H. Herbert	Strathcona.	5.00

Class 6.

1st.	G. H. Barrett	Lloydminster.	20.00
2nd.	J. M. Lorree.	Innisfree.	15.00
3rd.	Wm. Wilson	Bowden	12.00
4th.	E. E. Swift.	Magin.	8.00
5th.	A. F. McGill.	Clive.	5.00

Class 7.

1st.	Wm. Wilson.	Bowden.	18.00
2nd.	E. W. Simpson.	Lacombe.	14.00
3rd.	J. B. Ririe.	Magrath.	10.00

Class 8.

1st.	Wm. Wilson.	Bowden.	15.00
2nd.	J. M. Loree.	Innisfree.	10.00
3rd.	A. C. Bruns.	Lacombe.	5.00

Class 9.

1st.	J. B. Ririe.....	Magrath...	15.00
2nd.	F. H. Herbert.....	Strathcona..	10.00
3rd.	Wm. Wilson.....	Bowden.	5.00

Class 10.

1st.	Alex. Woolley.....	Norton..	12.00
2nd.	Thos. Henderson.....	Lacombe.	8.00

Class 12.

1st.	S. E. Howard.....	Innisfail..	12.00
2nd.	Jos. C. Peterson.....	Raymond..	8.00

Class 13.

1st.	P. A. Switzer.....	Lacombe.	12.00
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Class 14.

1st.	P. A. Switzer.....	Lacombe.	12.00
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Class 17.

1st.	Jos. C. Peterson..	Raymond..	12.00
2nd.	J. B. Ririe.....	Magrath..	8.00

JUDGING COMPETITIONS.

These competitions were held on the second day of the fair and were open to all farmers and farmers' sons in the province. The competitors were expected to judge several varieties of wheat and oats and to identify several samples of weed seeds. There were twenty young men entered in this contest.

Class 18.

1st.	R. M. Gibson.	Lacombe...	\$10.00
2nd.	H. Huxley.	Lloydminster	8.00
3rd.	E. H. Aldwinckle.	Lacombe.	5.00
4th.	A. Flack	Lacombe	3.00

Class 19.

1st.	Wm. Wilson.	Bowden	10.00
2nd.	R. M. Gibson	Lacombe	8.00
3rd.	H. Huxley..	Lloydminster	5.00
4th.	J. Black..	Bowden	3.00

Class 20.

1st.	Wm. Wilson.	Bowden	8.00
2nd.	J. C. Rasmussen..	Bowden	5.00
3rd.	A. Flack.	Lacombe	3.00

SILVER TROPHIES.

Winner of Alberta Pacific Elevator Co.'s Trophy	W. J. Glass, Macleod.
Winner of Farm Crops Cup...	W. J. Glass, Macleod.
Winner of Garton Pedigree Cup...	Ernest Swift, Viking.
Winner of Brackman-Ker Milling Co.'s Trophy...	C. H. Barrett, Lloydminster.
Winner of Calgary Brewing & Malting Co.'s Trophy.	G. H. Hutton, Lacombe.
Winner of Canadian Pacific Trophy.	J. B. Ririe, Magrath.

PUBLIC MEETINGS.

A number of public meetings were held in connection with the seed fair. Speakers were obtained to discuss various subjects of interest to the farmers of Alberta. These meetings were well attended and good discussions followed each address. The following was the programme:

WEDNESDAY EVENING, FEBRUARY 8TH.

GENERAL SESSION.

Address of welcome—Mayor of Lacombe.
 Address—W. F. Puffer, M.P.P. for Lacombe.
 Address—Jas. Murray, Brandon.
 Address—Hon. Duncan Marshall.
 Address—Prof. A. Atkinson.
 Interspersed with music, etc.

THURSDAY MORNING, FEBRUARY 9TH.

SESSION SUBJECT: WEEDS AND SMUT.

9.30-10.10—The weed situation in Alberta. C. E. Lewis.
 10.10-10.30—How may clean land be kept clean? E. H. Malcolm, Killam.
 10.30-10.50—How may dirty land be cleaned where summer fallow is impracticable,
 D. W. Warner, Edmonton.
 10.50-11.05—Discussion.
 11.05-11.30—The smut problem. F. H. Reed.
 11.30-11.50—Practical pointers on control of smut. A. Lougheed, Bowden.
 11.50-12.00—Discussion.

THURSDAY AFTERNOON, FEBRUARY 9TH.

SESSION SUBJECT: CROP IMPROVEMENT.

2.00-2.30—Early maturity of grain crops. W. H. McKillican.
 2.30-2.50—Seed fairs and seed competitions as a means of crop improvement.
 H. Huxley.
 2.50-3.00—Discussion.
 3.00-3.40—The improvement of grain crops by seed selection. W. H. Fairfield.
 3.40-4.00—The value of good seed to the farmer. S. Galbraith.
 4.00-4.10—Discussion.
 4.10-4.40—The Canadian Seed Growers' Association. F. H. Reed.
 4.40-5.00—The business end of pure seed growing. W. H. Pawson, Coaldale.

THURSDAY EVENING, FEBRUARY 9TH.

SESSION SUBJECT: FORAGE CROPS.

8.00- 8.25—The uses of grasses in Alberta agriculture. W. F. Stevens.
 8.25- 8.45—The growing and handling of tame grasses for hay. R. A. Wallace,
 High River.
 8.45- 8.55—Discussion.
 8.55- 9.30—Alfalfa, its value and importance. Prof. A. Atkinson.
 9.30- 9.50—Will alfalfa succeed in Alberta? G. H. Hutton.
 9.50-10.10—Practical pointers on alfalfa growing. Thos. H. Woolford, Cardston.
 10.10-10.20—Discussion.

FRIDAY MORNING, FEBRUARY 10TH.

SESSION SUBJECT: THE SOIL.

10.00-10.45—The theory and practise of dry farming. Prof. A. Atkinson.
 10.45-11.00—Discussion.
 11.00-11.30—The first year's work on the raw prairie. W. H. Fairfield.
 11.30-11.50—Practical pointers on breaking. C. B. Robertson.
 11.50-12.00—Discussion.

FRIDAY AFTERNOON, FEBRUARY 10TH.

SESSION SUBJECT: THE SOIL (CONTINUED).

- 2.00-2.40—Soil and moisture conditions in Alberta. Geo. Harcourt.
 2.40-3.00—The proper method of summer fallowing for Southern Alberta conditions. H. Mackintosh, Macleod.
 3.00-3.10—Discussion.
 3.10-3.30—Cultivation for producing large crops where summer fallowing is inadvisable. P. A. Switzer, Lacombe.
 3.30-4.25—Methods of cultivation for Central and Northern Alberta. G. H. Hutton.
 4.25-5.10—Discussion.

Although the exhibit was not as large as the previous year on account of the yield of grain having been somewhat lowered by drought during the season of 1910, the quality was good and the attendance was greater than that of the previous year.

ALBERTA FAIRS CONVENTION.

A fairs convention was held in Lethbridge on February 1 and 2, under the auspices of the Alberta Fairs Association. At this convention, dates were set for the various fairs. The following is a copy of the programme:

WEDNESDAY, FEBRUARY 1, 10 o'clock.

Opening of the convention.
 Presentation of Credentials.
 President's address.
 Minutes of the last convention.
 Report of executive committee.
 Appointment of resolution committee.
 Appointment of fair dates committee.
 Address by Hon. Duncan Marshall, *Minister of Agriculture*.
 Adjournment.

WEDNESDAY AFTERNOON SESSION, 2 o'clock.

Address by H. A. Craig, on "The Managing and Financing of the Fair."
 Addresses by—
 (1) H. Huxley, Lloydminster.
 (2) John Burn, Sedgewick
 (3) B. Matkin, Magrath; on
 "Organization for Fair Day," "Financing the Society," "Work other than Exhibition for a Society."
 General discussion on above subjects.
 Adjournment.

WEDNESDAY EVENING SESSION, 8 o'clock.

Address by Prof. Carlisle, Moscow, Idaho, on "Judges' Problems at Fairs"
 General discussion.
 Resolutions.
 Adjournment.

THURSDAY MORNING SESSION, 10 o'clock.

Report of fair dates committee.
 Further discussion on resolutions.
 Election of officers.
 Adjournment.

All of which is respectfully submitted,

C. E. LEWIS,
Superintendent of Fairs and Institutes.

8.—REPORT OF THE LIVE STOCK COMMISSIONER.

One of the principal lines of work taken up by this branch during the year 1911, was that of securing some definite regulations governing shipments of live stock.

Up to 1909 the only legislation to which shippers of live stock could point for the protection of their interests was that provided for in *The Criminal Code*, which requires that live stock shall not be kept in cars for more than twenty-eight consecutive hours without the consent, in writing, of the shipper or person in charge, unless they are so placed in the cars that they can lie down and be regularly fed and watered by the attendant; and that stock cars should be properly cleaned out and sanded at feeding points.

For a great many years it has been the practise of the railway companies to supply box cars in lieu of stock cars for the transportation of live stock. Although the service secured in this way was not generally satisfactory, the shippers were not prepared to object to it because they preferred getting even box cars, to no cars at all. In many instances, however, it was the practice of the railway companies to require that shippers supply their own planking for barricading the doors; this involved an expenditure on the part of the shipper of approximately \$1.25 for each door he had to barricade. A number of complaints were received from shippers on that score and on March 9, 1909, the writer submitted a formal complaint to the Board of Railway Commissioners on the subject and secured an order requiring that whenever a shipper is obliged to supply the necessary material for the car doors he shall be given a credit on his way bill of \$1.25 for each door he has thus to provide for.

Since that time a number of complaints have been received by the writer from shippers on various subjects against which there is no legislation for their protection. Some shippers were subjected to long delays and their animals kept on board cars without feed or water for forty, fifty and in some instances for sixty hours. Other shippers complained of long delays in getting their cars spotted for unloading after reaching their destination; others that they were unable to get information as to when they would proceed through a divisional or junctional point. There were numerous complaints also of overcharging, in cases where box cars had been supplied in lieu of stock cars.

Owing to the great variety of subjects on which complaints were received the writer decided early in the year that instead of dealing with the subjects piecemeal the best method to pursue would be to submit to the Board of Railway Commissioners for approval a list of regulations covering the entire subject of live stock shipping.

In company with the Honourable the Minister of Agriculture, he went to Ottawa and on February 22, 1911, conferred with the Dominion Live Stock Commissioner, Dr. J. G. Rutherford, on the subject. At this conference it was agreed to draft a set of regulations which would be submitted to the Board of Railway Commissioners in the name of the Dominion Live Stock Commissioner. Accordingly after conferring with a large number of shippers and breeders

of live stock, the following regulations were drafted and forwarded to Ottawa for approval. They were signed by Dr. J. G. Rutherford and submitted to the Board of Railway Commissioners:

Proposed Regulations Submitted to the Board of Railway Commissioners Respecting the Shipment of Live Stock for the Dominion of Canada.

INTERPRETATION.

1. In these regulations unless the context otherwise requires—
 - (a) "Agent" referring to a station agent, shall mean any railway station agent.
 - (b) "Applicant" referring to an applicant for cars shall mean any corporation, co-partnership or person who owns live stock for shipment in car lots or who is the agent of the owner of such live stock.
 - (c) "Live stock" shall include horses, cattle, sheep, swine, mules, asses and goats.
 - (d) "Car of live stock" shall mean any railway car loaded with live stock in the usual manner of conveying live stock to market.
 - (e) "Station" shall mean any railway station at which the railway company is represented by an agent.
 - (f) "Sub-station" shall mean any point of place on a railway at which freight is received or shipped and at which the company is not represented by an agent.
 - (g) "Feeding point" shall mean any place or point at which there is maintained a stock yard or yards for the feeding, watering and resting of live stock while en route.
 - (h) "Shipper" shall mean any applicant to whom one or more cars have been allotted.
 - (i) "Attendant" shall mean the person named by the shipper in the way bill as being in charge of one or more cars of live stock.
 - (j) "Company" shall mean any railway company doing business or operating a railway in Canada over which the Parliament of Canada has Legislative authority.
 - (k) "Spotting cars" shall mean placing the same at a stock yard so that they may be loaded or unloaded conveniently, or where there is no stock yard, at a loading chute.
 - (l) "Book rest" shall mean the signifying by one or more members of a train that he or they have worked the number of hours required by law and are in need of rest.

ORDERING CARS.

2. When application for one or more cars is received by the agent of any company, the same shall be immediately entered in a book to be kept by the company for that purpose and said book shall contain:

- (a) The hour and date when said application was received.
- (b) The name of each applicant.
- (c) The place where each car is to be loaded.
- (d) The hour and date when shipment is to be made.
- (e) The number of each car allotted.
- (f) The hour and date when the same was loaded.
- (g) The destination of each car.

3. Applications may be made in person, by mail or by telegram to the agent in charge of the station or sub-station from which shipment is to be made.

4. The company shall post in a conspicuous place at each sub-station a notice giving the name of the station at which application for cars to be loaded or shipped from such sub-station must be made.

When determining the station at which application must be made for cars to be loaded and shipped at a sub-station, the company shall take into consideration the convenience of the shipper.

ALLOTING CARS.

5. All cars must be allotted by the agent and in the order in which the applications are received.

6. A shipper shall not put or place live stock into any car other than the car duly allotted to him.

7. (a) When the company cannot supply or furnish stock cars for all applicants it may substitute box cars therefor, in the proportion of not less than three box cars for every two stock cars applied for.

(b) When box cars are supplied in lieu of stock cars, as provided in the preceding section, the minimum weight to be charged by the company shall be the weight the company would have been entitled to charge had stock cars been supplied or furnished.

(c) Before supplying box cars in lieu of stock cars, as provided in section 7 hereof, all the stock cars available at a station or sub-station shall be allotted first in the order in which each application is received by the agent, unless an applicant signifies a preference for box cars.

8. A car or cars shall not be re-allotted without the consent of the shipper to whom same were allotted; provided that if a shipper fails to load or to commence loading any car or cars allotted to him within 24 hours after the hour when shipment was to have been made as shown by the car order book, said car or cars may be re-allotted to the applicant or applicants whose names appear next in order on the car order book.

SUPPLYING CARS.

9. When an application is made for less than ten cars, the same shall be supplied and delivered by the company to the station or sub-station mentioned in the car order book, within five days after the receipt, by the agent, of said application and when an application is received by an agent for ten or more cars the same shall be supplied and delivered to the said station or sub-station within ten days after the receipt of said application.

10. Said cars shall be in good order and in fit condition for the transportation of live stock, and the same shall be placed for loading at the stock yards or loading chute as mentioned in said car order book.

11. When a shipment is to be made during the winter months to a point more than five hundred miles distant from the place of loading or when a shipment is to be made during extremely cold weather to any point, the company shall as far as possible, supply box cars when application is made therefor.

12. The company shall be entitled to make a charge for a minimum weight of 16,000 pounds for each box car supplied under section 11; provided that this section shall not apply when box cars are supplied by the company under section 7 hereof.

CAR REPAIRER.

13. When five or more cars are to be loaded at one station or sub-station for the same train, a car repairer shall be supplied by the company to attend at said station or sub-station during time of loading, to make all necessary repairs.

14. When a company fails to comply with the provisions of section 13, each shipper shall receive a credit on his way bill of one dollar (\$1.00) for each car he has had to load without the assistance of a car repairer, as provided in section 13.

ARRIVAL OF TRAINS.

15. Every agent on reasonable demand shall advise a shipper whether or not the train on which the latter proposes to ship live stock is running on time and of the hour at which said train will probably arrive.

16. Shipments of live stock when hauled by a way-freight or pick-up may be completed while en route in the direct line of transit between original shipping point and destination, at an extra charge of three dollars (\$3.00) per car for each stop off west of Winnipeg and two dollars (\$2.00) per car for each stop off east of Winnipeg.

BOOKING REST.

17. When any member of a crew operating a train which is hauling one or more cars of live stock intends to book rest he shall give to the conductor in charge thereof, at least two hours notice of said intention, and on receipt of said notice or at two hours before said conductor himself intends to book rest, he said conductor, shall advise the attendant in charge of said live stock on his train, of the intention to book rest and of the probable delay that will be occasioned thereby,

and said conductor shall ascertain from such attendant if he desires to unload the stock in his charge during the period of such rest, and he shall immediately report the same to the train despatcher in whose division said train is running.

18. If said attendant states that he desires to unload and rest the stock in his charge, said despatcher shall immediately upon receipt of said report give the train carrying said live stock precedence over all other trains, except passenger and mail trains, and said train shall be rushed to such point where said stock may be unloaded for feed and water during the time said crew is resting.

19. If a properly equipped yard for feeding and watering live stock "can" be reached within two hours after receipt of the notice mentioned in section 17, said train shall be rushed to said yard for the purpose of unloading, feeding and watering.

FEEDING EN ROUTE.

20. Shippers, if they so desire, may provide their own feed for live stock during transportation.

21. All contracts with the company for the conveying of live stock shall contain a clause in which shippers may make known to the company that they desire to provide their own feed at such points as may be necessary to rest and feed said live stock.

22. Shippers who provide their own feed shall be accorded the same privileges in respect to yard room, water and shelter as are accorded those who secure their feed from the company.

23. Live stock shall not be detained at a feeding point for more than twelve hours without the written consent of the shipper or attendant.

24. Stock yards containing feeding racks and watering troughs shall be provided at junction, divisional and other points where delays occur in forwarding trains, which yards shall have capacity sufficient for feeding and watering such consignments of live stock as ordinarily pass through such points.

DELAYS AT JUNCTIONS AND OTHER POINTS.

25. When a despatcher has reason to believe that there will be a delay of four or more hours in forwarding live stock through a junctional, divisional or feeding point, he shall so advise the conductor on the train hauling said live stock and said conductor shall immediately inform the attendant on such stock of the probable delay and if the attendant desires to unload and rest during such delay, the cars containing the live stock under his charge shall be spotted or placed for unloading before the engine is detached from the train.

26. When a train which is to haul live stock from a junctional, divisional or feeding point will be delayed four hours or longer, the agent shall advise at once all attendants who have either loaded or been ordered to load, of such delay and he shall cause all cars that have been loaded to be spotted or placed for unloading if requested to do so by the attendant.

DELAY AT LOADING POINT.

27. When a train which was to have hauled live stock from a station, is delayed for four hours or longer, the agent shall at once inform all shippers or attendants who have loaded or have been ordered to load, of the probable length of such delay.

SPOTTING CARS FOR UNLOADING.

28. Cars containing live stock shall be spotted or placed by the company for unloading with as little delay as possible and in no case shall such delay exceed two hours after arriving at point of destination or feeding point.

29. Cars shall be spotted or placed for unloading by the company in the order of the arrival of the trains in which they were included and in the order of their position in such train beginning at either the front or the rear end.

30. After arrival at point of destination live stock shall not be moved from the stock yard until the freight is paid, but this shall not apply to abattoirs or companies having special arrangement for unloading before the freight is adjusted.

STOCK TRAINS.

31. Any train containing ten or more cars of live stock shall have precedence over all other trains excepting passenger or mail trains.

32. Cars containing live stock shall not be included in a way-freight train beyond the first divisional point after they were picked up, unless there are no through freight trains running over said line or unless they are consigned to a point in the next succeeding division of said railway.

33. Cars containing live stock shall not be included in a ballast train without the written consent of the shipper or attendant.

TRANSPORTATION OF ATTENDANTS.

34. It shall be the duty of the railway company to provide suitable and proper accommodation for the attendants on live stock on the same train in which said live stock is hauled and such accommodation shall be open to and available for all attendants on live stock in any train as soon as such train is made up.

PROSECUTIONS AND PENALTIES.

35. Any person, co-partnership, company or corporation who shall violate section 6 hereof, shall for every car taken or used in contravention of the said section be liable on summary conviction before a police magistrate or two justices of the peace to a penalty of not less than \$10.00 nor more than \$50.00 and costs for every such car so taken.

36. Any person, co-partnership, company or corporation who shall violate any of the provisions of sections 9, 10, or 11 shall be dealt with and punished by the Board of Railway Commissioners for Canada.

37. Any person, co-partnership, company or corporation who shall violate any of the provisions of these regulations, for which violation no penalty is herein specifically provided, shall on summary conviction before a police magistrate or two justices of the peace, be liable to a fine of not less than \$5.00 nor more than \$50.00 and costs for each offence.

38. No conviction, judgment or order in respect of any offence against these regulations shall be removed by certiorari or otherwise into any of His Majesty's Courts of Record

39. The imposition of any such penalty shall not lessen or affect any other liability which any company, co-partnership, person or corporation may have incurred.

These regulations came up for discussion at the sitting of the board at Calgary on September 8, 1911, and at Edmonton on September 11, 1911. The discussion at Calgary was somewhat informal and consisted of the endorsement of the regulations by the United Farmers of Alberta through the president and secretary of that organization.

The case was formally introduced at the sitting held at Edmonton on September 11, 1911, by Mr. L. F. Clarry, Deputy Attorney-General for the province, and it was briefly spoken to by the writer. Mr. H. C. McMullen, General Live Stock Agent for the Canadian Pacific Railway Company, acted as spokesman for the railway companies. Before Mr. McMullen had completed his argument an adjournment was taken for lunch.

After adjournment the representatives of the Canadian Northern and Grand Trunk Railway Companies objected to the continuance of the discussion and disclaimed any responsibility for the statements of Mr. McMullen.

After considerable discussion it was agreed that the railway companies should have thirty days in which to submit a written defence and that the writer should have fifteen days in which to reply,

The railway companies failed to file their written objections within the time specified and the hearing before the commissioner was never held.

Notice was received from Mr. J. E. Walsh, K.C., Managing Director of the Transportation Branch of the Canadian Manufacturers' Association, stating that the railway companies had submitted to the board of Railway Commissioners for approval a new live stock shipping contract. Copies of this contract were sent, with criticisms and remarks by the writer, to the various shippers of the province and to the Alberta Live Stock Associations, Calgary, and the Alberta Provincial Live Stock Associations. Edmonton:

Company.

. . . Station 191

WITNESSETH, that the shipper has delivered to the carrier live stock of the kind and number, and consigned and destined by the shipper as follows:

for transportation from.....to destination, if on the line of railway of the carrier, otherwise, to the place where said live stock is to be received by the connecting carrier for transportation to or toward destination; and that the same has been received by the carrier for itself and on behalf of connecting carriers for transportation, subject to the classifications and tariffs of the carriers, in effect on the date of this contract, and upon the following terms and conditions:

1. That the shipper or the consignee is to pay freight thereon to the carrier at the rate of.....per one hundred pounds which is the lower published tariff rate and is based upon the express condition that the carrier shall in no case

be liable for loss or injury or damage to said live stock in excess of the following agreed valuation or a proportionate sum in any one case upon which valuation the rate charged for the transportation of the said live stock is based and beyond which valuation neither the carrier nor any connecting carrier shall be liable in any event, whether the loss, injury or damage occurs through the negligence of the carrier or any connecting carrier or their or either of their employees or otherwise, viz.:

Horses or mules not exceeding \$100 each.

Cattle not exceeding \$50 each.

Any other domestic animal not exceeding \$10 each.

In no event shall the carrier's liability exceed \$1,200 upon any one carload. (See criticism No. 1.)

2. That the shipper is to repay all charges advanced by the carrier or connecting carriers upon or for the transportation of said live stock.

3. That the shipper is at his own risk and expense to load, feed, water and in all respects take care of the said live stock while in the cars and unload the same. In case any of the employees of the carrier or any connecting carrier load, unload, feed, water or otherwise care for the said live stock, or assist in doing so, they shall be treated as the agents of the shipper for that purpose, and not as the agents of the carrier. (See criticism No. 2.)

4. That if the destination of the shipment of said live stock is more than one hundred miles from the point of shipment, the shipper or some person on his behalf (not an employee of the carrier) must unless special arrangements are otherwise made in writing, accompany and care for the shipment throughout the journey.

5. That the shipper shall see that all doors and openings in said car or cars are at all times so closed and fastened as to prevent the escape therefrom of any of the said live stock, and neither the carrier nor any connecting carrier shall be liable on account of the escape of any of the said live stock from said car or cars. (See criticism No. 3.)

6. Neither the carrier nor any connecting carrier shall be liable for or on account of any loss, damage, injury or delay sustained by said live stock, occasioned by any or either of the following causes, to wit: Overloading, crowding one upon another, kicking or goring, bruising or wounding, inherent vice, loading or unloading, suffocation, fright, burning of hay or straw, or other material used for feeding or hedding, or by heat, cold or by changes in weather; or delay caused by stress of weather or obstruction of track, or by the act of God, the King's or public enemies, riots, strikes, the act or default of the shipper, the authority of law, quarantine, or causes beyond the carrier's or connecting carrier's control. (See criticism No. 4.)

The carrier or any connecting carrier liable on account of loss, injury or damage to any of the said live stock, upon reimbursing to the insurer the premiums paid in respect thereof, shall have the full benefit of any insurance that may have been effected upon or on account of said live stock, so far as this shall not avoid the policies or contracts of insurance. The insurer shall assign any such insurance as a condition to his becoming entitled to payment of any loss hereunder. (See criticism No. 5.)

7. That in the event of any unusual delay or detention of said live stock caused by the negligence of the carrier or its employees or any connecting carrier or its employees, or otherwise, the shipper agrees to accept as full compensation for all loss or damage sustained thereby, the amount actually expended by the shipper in the purchase of necessary food and water for the said live stock while so detained. (See criticism No. 6.)

No carrier shall be liable for any loss or damage unless written notice of such loss or damage shall be made and delivered to the agent of the carrier at the point of delivery or point of destination within five days from the time said live stock is removed from said car or cars; and if any loss or damage occurs upon a line of a connecting carrier, then such carrier shall not be liable unless notice shall be given in like manner and delivered in like time to some proper officer or agent of the carrier on whose line the loss or injury occurs.

8. In consideration of the carrier or any connecting carrier allowing the person or persons accompanying said live stock under this contract, to make the journey by the same train as the said live stock either in the caboose or in the same car as the said live stock or otherwise, for the purpose of caring for the same, the shipper expressly agrees that neither the carrier nor any connecting carrier shall be liable either for loss of life or personal injury however caused to the person or persons accompanying said live stock, whether such person or persons are carried free or at a rate less than full fare and whether such injury is sustained while such persons are actually accompanying such stock or returning to point of origin after delivery of same at destination has been affected or otherwise travelling upon transportation issued in connection with this contract; and the shipper shall and will indemnify and save harmless the carrier and any connecting carrier therefrom. (See criticism No. 7.)

The shipper covenants with the carriers that all persons accompanying any such live stock shall, at the time of engagement, be fully informed as to the provisions of this clause, and that the Company may assume that all such persons accept such transportation with full knowledge of the terms of the agreement that the carriers shall not be liable either for loss of life or personal injury however caused to such person.

9. The word "shipper" in this contract includes the owner of said live stock, and his, or her or their personal agent or agents.

10. Any alteration, addition or erasure in this contract shall be signed or initialled in the margin by an agent of the carrier making this contract, and if not so signed or initialled shall be without effect, and it is further agreed that under no circumstances shall any officer, agent or employee of the carrier waive verbally or otherwise the provisions of this contract or any of them.

11. I, _____, do hereby acknowledge that I had the option of shipping the above described live stock at a higher rate of freight than that payable hereunder and according to the classifications and tariffs of the carrier or connecting carriers, the effect of which I understand would be to remove the limitation on the amount of damages for which the carrier or connecting carrier might be liable as herein provided and that I have voluntarily elected to accept the limitation of liability herein contained to enable me to obtain the reduced freight rate above mentioned.

THE.

By.

COMPANY

Station Agent.

WITNESS MY HAND,

WITNESS:

By.

Shipper.

Shipper's Agent.

Proof as decided upon at meeting of Advisory Committee.

Montreal, Que., December 28th, 1910.

RELEASE.

I We, the undersigned, hereby declare that I am we are bona fide in charge of the consignment of live stock referred to in the within contract, and in consideration of the carrier and any connecting carrier permitting me us whether with or without charge for my our carriage, to make the journey by the same train as the said live stock, either in the caboose or in the same car as the live stock, I we voluntarily assume all risk of accident to person or property and declare that such permission is given upon the express condition that neither the carrier nor any connecting carrier is to be held liable either to me us or to my our representatives, for loss of life or personal injury however caused (while making such journey or while upon the premises of the carrier or the premises of any connecting carrier) and I we hereby release and discharge the carrier and any connecting carrier from all claims arising by reason of any injury or injuries which I we may sustain on or during said journey or while upon the premises of the carrier or any connecting carrier whether such injury or injuries be caused by the negligence of the carrier or of any connecting carrier or its employees or otherwise.

Signature of Man or Men in charge.
(To be obtained by Agent.)

Verification of signature of Man or Men
in charge.
(To be obtained by Conductor.)

..... Station... 191

.....

.....

.....

.....

Witness... ..

NOTICE TO AGENTS AND CONDUCTORS.

AGENTS must require those entitled to free passage or reduced fare in charge of live stock under the Special Live Stock Contract to write their own names on the lines above in the space provided for that purpose.

CONDUCTORS must verify the signature of man in charge by requiring him to reproduce his signature on the lines above in the space provided for that purpose, for comparison with that on the original Release printed above. If the signature thus obtained does not correspond with that on the Release, Conductors must require attendant to sign the Release.

If for any reason the Release has not been signed by the attendant in charge before leaving shipping station the Conductor must require the execution of the Release by obtaining signature of attendant thereon.

Criticisms and Remarks on Special Live Stock Contract.

1. (a) Reference is made to the "lower published tariff"; a copy of the *higher published tariff* should be asked for.

(b) *Valuation of carloads too low.* The company should be liable for the full value of the stock; the burden being on the shipper to prove the value.

2. (a) Section 3 of the contract should have the provision that proper equipment for loading, unloading, feeding and watering has been provided and that the same was in good order.

(b) The burden of proof that the equipment was in good order should be on the company.

3. (a) The provision should be added that the car was in good order and properly equipped with the "bull bar" and fastenings.

4. (a) In section 6 of the contract the exemption from liability for injuries sustained in loading and unloading, should be made subject to the provisions of criticism 2.

(b) The exemption from liability because of fire occasioned by the burning of hay or straw used for feeding, should have the provision that the car was equipped with feed racks and properly sided to protect the hay in the racks against fire.

(c) The word "strikes" should be omitted.

5. (a) Subsection 2 of section 6 should be stricken out.

6. (a) The first clause of section 7 of the contract should be stricken out.

7. (a) When an attendant is paying for his return passage, the carrier should be liable to him for injuries sustained the same as it is to other passengers travelling at the same fare.

The above are the criticisms that occur to me. It is probable that still others may occur to you. Please arrange to be present at the meeting that has been called to discuss this contract in order that the objections of the shippers may be effective.

Yours very truly,

W. F. STEVENS,

Live Stock Commissioner.

The writer attended meetings of these various interests and the following action was taken:

On subsection 1 of section No. 1 of the contract a motion was adopted as follows: We object to any special contract based upon a *lower published tariff rate*, unless accompanied by and attached to a copy of the contract based upon the *standard or higher published tariff rate*. On subsection 2 of section No. 1 of the contract the criticisms offered by Mr. Stevens were adopted.

No action was taken regarding section No. 2 of the contract,

On section No. 3 of the contract the criticisms offered by the Live Stock Commissioner were adopted.

On section No. 4 of the contract no action was taken.

On section No. 5 of the contract the criticisms and suggestions offered by the Live Stock Commissioner were adopted.

On subsection No. 1 of section No. 6 of the contract the criticisms and suggestions offered by the Live Stock Commissioner were adopted. On subsection 2 of section No. 6 the provision was added that this subsection should apply only when compensation for damages has been made to the shipper on the basis of the full value of the stock.

As regards section No. 8 of the contract a motion was carried directing attention to the fact that in as much as section No. 4 of the contract makes it necessary for somebody to accompany shipments of live stock when being conveyed for distances of more than one hundred miles, the word "allowing" which appears in said section No. 8 is inappropriate and the contract should stipulate that attendants be accorded suitable accommodation and that the company be made liable for all injuries sustained by such attendant when the same was occasioned by the wilful act or neglect of the company or any of its employees.

On sections 9 and 10 of the contract no action was taken.

Regarding section No. 11 of the contract it was the opinion of the shippers that the provisions of this section should apply only when said contract based upon the lower published tariff rate was accompanied by and attached to a copy of the contract based upon the higher published tariff rate and the same had been duly explained by the agent.

On December 9, 1911, a convention of all the live stock interests of the Dominion was held in Toronto, Ontario, for the purpose of discussing this new Live Stock Shipping Contract and determining what action they would take regarding it. The following were present:

D. McRae, Dominion Sheep Breeders' Association.
 S. R. Parsons, Canadian Manufacturers Association.
 A. W. Talbot, Ontario Local Live Stock Shippers Association.
 Samuel Hisey, Creemore Live Stock Shippers Association.
 A. B. Quinn, Toronto Live Stock Association.
 William Jones, Zenda, Ontario, Dominion Swine Breeders Association.
 J. B. Shields, Toronto Live Stock Association.
 W. F. Stevens, Live Stock Commissioner.
 Chas. S. Hotchkiss, Cattle, Sheep and Swine Breeders' Associations, Alta.
 Geo. Lane, Horse Breeders' Association, Alberta.
 A. E. Peterman, Toronto Live Stock Exchange.
 (Miss) E. A. Hind, Manitoba Live Stock Breeders' Association.
 Stephen Benson, Manitoba Live Stock Association.
 John Graham, Manitoba Live Stock Association.
 A. J. McKay, Manitoba Live Stock Association.
 P. M. Bredt, Live Stock Commissioner, Saskatchewan.
 R. J. Phinn, Winter Fair Board, Saskatchewan.
 E. Maybee, Toronto Live Stock Exchange.
 W. J. Neely, Toronto Live Stock Exchange.
 F. L. Hunnisett, Toronto Live Stock Exchange.
 J. S. McLean, Toronto Live Stock Exchange.
 E. C. Fox, The William Davies Co., Ltd.
 J. E. Knuckey, Swift Canadian Co., Ltd.
 Robert Hess, Howick, Quebec.
 W. S. Tilson, Montreal Board of Trade.
 J. E. Walsh, Canadian Manufacturers' Association, Winnipeg Board of Trade and Western Live Stock Shippers' Association.

Mr. D. McRae was elected chairman and Mr. J. E. Walsh was elected secretary.

After some discussion it was decided that it would be advisable to employ counsel to act on behalf of the breeders at such conferences as might be held with the railway companies and to present the matter to the Board of Railway Commissioners if necessary. Mr. M. K. Cowan, K.C., was selected as the counsel for all the live stock interests, except the Shorthorn breeders of the Dominion. They chose as their counsel Mr. Peter White, K.C., Pembroke, Ont., President Dominion Shorthorn Breeders' Association. The counsel thus selected were advised of their appointment and requested to be present at once.

After a brief presentation of the history of the law relating to live stock shipments by Mr. Cowan, the regulations were taken up in detail and the opinions, objections and suggestions of all the delegates were secured. It was mutually agreed that upon the two most important questions raised by this live stock contract the

delegates would force the matter to go before the Board of Railway Commissioners rather than assent to the demands of the transportation companies. These points were that they would not release the railway companies from responsibility for losses sustained because of negligence of the companies or their employees, as set forth in clauses 1 and 8 of the proposed contract, and that they would not relieve the company of responsibility for negligence in case of injury to an attendant upon live stock in transit, as set forth in clause 8, nor would they agree that it should be the duty of the shipper to secure the signature of such attendant to the release of the company from such responsibility, as set forth in clause 9 of the proposed contract.

At the present writing, December 31, 1911, no further action had been taken and the matter is still in the hands of counsel with instructions to notify all parties interested, of progress being made and to call another convention in case circumstances should arise which would make such a convention advisable,

Stock Yard Improvement.

Some progress has been made in the matter of stock yard improvement during the year 1911.

Although two years had elapsed since the order was issued directing the railway companies operating in the province to make the improvements in their stock yards specified in the report of Mr. Frank Dillinger, dated August 3, 1909, there were several points at which the terms of the order had not been carried out. The principal points that were being thus neglected were Cardston, Wetaskiwin and Vermilion.

CARDSTON.

The difficulty existing at Cardston was that owing to the large rainfall and the tenacious soil peculiar to that district, the drainage of the yards became very bad.

Mr. Dillinger's report on these yards reads as follows:

There is a two pen yard here in good repair; one pen very large; drainage very bad. The large pen should have a fence put through the centre making two pens out of it and another large yard erected at the north end of the present yard with a wing drive and gate at the end of the drive. The bottoms of the pens should be cleaned out and floored with old ties and covered with 5 or 6 inches of cinders. Fence on the loading chute is only about 3½ feet high and cattle jump out. This fence should be two feet higher; also requires water trough on the ground and a new gang plank. Water can be had at a depth of 15 feet and a well and pump should be installed. Where the wing drive now is, it is very difficult to get cattle into the yard on account of buildings too close to yard and stampedes the cattle.

203 cars of stock shipped from here last year.

292 cars of stock shipped from here in 1910.

The attention of Mr. Naismith, Superintendent of the Alberta Railway and Irrigation Company, had been repeatedly directed to the fact that these yards had not been cleaned out and paved with ties as ordered. He maintained that the improvements made by the company were all that were required. A complaint was submitted on the matter to the Board of Railway Commissioners and came up for hearing at Kipp, on September 8, 1911. After hearing the arguments in the case the Board ordered an inspection of the yards by

Inspector McCaul. However, before the inspection was made the company installed the paving and covered the same with gravel and the inspector reported the yard in good order.

WETASKIWIN.

Following is a copy of Mr. Dillinger's report regarding the yards at Wetaskiwin.

There is a six-pen yard here, four small and two very large pens; drainage good in all but three pens which require to be floored with old ties and covered with cinders. There are two small shelter sheds that have been wrongly constructed, have no trough or racks; should have a two-pen shelter shed, water troughs and racks; water can be had at a depth of 25 feet and well and pump should be installed; has a loading wing and a wing drive and two chutes, everything in good repair.

313 cars shipped last year.

The order regarding paving was promptly complied with; a well with pump had also been installed, but the latter was of such an inferior and flimsy nature and was so placed that the cattle were crowded against it while being driven into the yards, with the result that it was out of order most of the time. The order to install feeding racks and shelter sheds had not been complied with up to June 1, 1911.

The attention of the General Live Stock Agent of the Canadian Pacific Railway was directed to the matter and he was urged by the writer to attend to it at once.

The writer examined these yards in July and found the shelter sheds had been erected and a new pump had been installed, but the workmen had left without constructing the feeding racks. He thereupon sent a complaint regarding the matter to the Board of Railway Commissioners and one to the railway company interested. Before the board reached Alberta the feeding racks were built and the matter was dropped.

VERMILION.

The conditions existing at Vermilion and the requirements of the yards at that place as set forth by Mr. Dillinger were as follows:

There is a three-pen yard here, pens very large; repairs good with the exception that gates should have fastenings on them; they have to be tied with rope or wire; drainage good; wing drive requires some board put on; should have water trough for hogs and shelter sheds and hay racks on account of stock having to be kept over night; water over 100 feet deep, but can be had at town well 500 feet away. There are two chutes on this yard. Loading chute on each wing should be rearranged.

16 cars shipped last year.

Up to July 1st, 1911, nothing had been done to provide the feeding racks required by the order. The attention of Mr. W. A. Brown, Superintendent of the Canadian Northern Railway, was directed to the matter. He assured the writer that the matter would be attended to without delay. The writer has been informed that the feeding racks were installed as ordered but up to the present writing has not had time to examine them personally.

Sheep Commission.

During the month of April the Sheep Commission, consisting of Mr. Wm. Dryden of Brooklin, Ontario, and Mr. W. T. Ritch of

Ottawa, Ontario, which had been appointed by the Dominion Government for the purpose of inquiring into the sheep industry and of making such suggestions as might tend to place this industry on a more prosperous basis, visited this province. Three sittings in all were held, and attended by the writer.

LETHBRIDGE.

The first sitting was held in Lethbridge on March 27-28, 1911, and the majority of those who appeared to give evidence and make suggestions were ranchers who were running flocks of from two to three thousand head on lands leased from the government, or upon the unoccupied lands of speculators. The matters complained of generally by them were the low price of wool and the difficulty in securing pasture. These men represented that there were in the southern portion of the province large areas of rough, stony and sandy lands which are unsuited for agricultural purposes and which could with greater benefit to the province be leased to stock men for grazing purposes, rather than to be occupied for a period by farmers who would require but two or three unfavourable seasons to put them out of business. They also represented that west of the foot hills and in the mountains there are numerous valleys which would sustain one or two flocks of sheep each during the summer months, and they asked that permission be granted to flockmasters to occupy these valleys during that time.

CALGARY.

The sitting at Calgary was held on March 29-30, 1911, and the majority of those who attended were breeders of pure bred stock. They also complained of the prices paid for wool which seemed to them to be unnecessarily low. The difficulty of protecting their flocks against coyotes and wandering dogs was also complained of and they suggested that the Dominion Government grant what assistance it is able to do in marketing the wool product of the province and to reduce the duty on woven wire fencing in order to enable settlers to fence their lands properly and protect their flocks against the depredations of coyotes and dogs.

EDMONTON.

The sitting at Edmonton was held on March 31 and April 1, 1911, and was attended principally by farmers who are keeping a small flock of sheep. The complaints and suggestions were very similar to those received at the Calgary sitting. One settler, however, complained that a number of his sheep were dying and that he had been informed that the cause of the difficulty was "gid." After inquiring closely regarding the symptoms he was advised by Commissioner Dryden that the difficulty was not "gid" but indigestion, as a result of being kept too long on dry feed. Mr. Dryden suggested that if he had no root crop available he should purchase a quantity of wheat bran and mix about one half pound of epsom salts with each bag of bran and allow the sheep to eat it.

At the close of each sitting Mr. Ritch gave an address on the general subject of wool and mutton production in Great Britain, Australia, New Zealand and the Dominion of Canada. He pointed out the defects in the methods of the Canadian sheep ranchers and

the difficulties under which they were labouring. He promised to make such recommendations as in his opinion would assist them in overcoming these difficulties and would enable them to improve their methods of handling their wool product.

He stated that as a general proposition they would find that the best means of securing full value for their wool in Canada would be to put it up in such condition as would cause it to find ready sale on some other market.

He claimed that Great Britain is the world's greatest wool market and the only foreign market that is open to the Canadian wool grower. He said the British wool buyer is keen to secure everything of a good quality that is put up in the right manner, but he is very indifferent to an inferior article or one put up in a careless manner.

He informed the wool growers that the greatest difficulty connected with marketing Canadian wool is that the sheep are not properly dipped and the wool did not look as well nor was it in as healthy condition as is the wool from New Zealand and Australia where the flockmasters are very careful to dip their sheep and protect them against disease and vermin. He recommended a poisonous dip in the spring and a non-poisonous dip in the autumn. The reasons assigned for this were that the poisonous dip tended to open up the fleece, and the animal would not be so likely to suffer from heat during the warm days which sometimes come early in the spring. The reasons assigned for recommending a non-poisonous dip in the fall is that this dip tends to close up the fleece and make it less easily penetrated by rain and snow and assures a greater degree of warmth during the winter months.

Mr. Ritch also strongly urged the breeders to discontinue the use of binder twine for tying up the fleeces and jute bagging for their bales. He stated that the vegetable fibre of the jute bagging and binder twine gets mixed up with the wool and it is impossible to manufacture a good grade of cloth where these fibres are present, no matter how good the wool itself may be.

He exhibited samples of hemp bagging as used by the British wool growers and of the bagging used by Australian and New Zealand wool growers. He also exhibited samples of paper lined jute bagging which he thought would be suitable for use by Canadian farmers and flockmasters in that it was very cheap and afforded ample protection for the fleeces against being contaminated by the vegetable fibres of the jute bagging.

A great deal of interest was manifested by the wool growers in these addresses and Mr. Ritch was not only able to arouse a keen interest in the sheep industry as a whole, but he made valuable suggestions regarding the means of making this industry much more profitable in the future than it has been in the past.

A particular feature of the industry during the year 1911, which in the opinion of the writer is traceable in part at least to the work of Messrs. Ritch and Dryden, is that a much larger number of sheep were placed on Alberta farms and feed lots during the autumn months.

At the present writing these flocks are doing well and there is every reason to believe from present indications that sheep raising and the winter feeding of sheep can be made a profitable industry in this province.

W. F. STEVENS,

Live Stock Commissioner.

9.—REPORT OF THE PROVINCIAL MEDICAL
OFFICER OF HEALTH.

SIR,—I beg to submit a synopsis of the work performed in this branch of your department.

I.—PUBLIC HEALTH.

On the 16th of December last the present *Public Health Act* was assented to by the Legislature, to come into force the first day of March, 1911.

REGULATIONS.

It was thought that by the latter date the regulations made by the Provincial Board of Health under power conferred on the board by the Act would be completed; but it was found that the work entailed in the preparation of these regulations caused some delay, and it was not until the 9th of June that the regulations were approved by the Lieutenant Governor in Council and these regulations became law.

I am glad to be able to report that the administration of public health matters throughout the province has been greatly facilitated by these regulations notwithstanding that they have created a great deal more work in this office, and with it much more responsibility entailed upon the part of the government officials whose duty it is to see that the requirements of the Act are fulfilled. Since the regulations came into force, they have been found to work without such friction as might reasonably be expected to occur from a complete change of a set of laws.

In connection with these regulations I may be permitted to quote from a letter which was received at this office from Doctor Montizambert, Director General of Public Health at Ottawa, whose opinion on any matters pertaining to public health cannot be questioned.

I studied with much interest during my trip east a copy of the Public Health Act of the Province of Alberta, which you gave me, and as to which you asked me to freely write my opinions. I would say that with regard to the Act respecting Public Health it seems to me most complete and admirable.

The work of the provincial board has not been centralized so that the work is carried out by the Provincial Medical Officer of Health, the Provincial Sanitary Engineer and the Provincial Bacteriologist, all of whom are officers of the Department of Agriculture, and who outside of the board have the direct management of different divisions in respect to public health.

On April 8, the following order was issued by the Provincial Board:

That the discretionary power granted to the board under section 12 (2), which has been exercised up to the present time shall not be exercised beyond the 31st day of December, 1911, and that all cities and towns having a sewerage system

in operation must have completed a sewage disposal system satisfactory to the board on or before that date, and that this order shall apply also to all packing plants and tanneries;

Provided that in the case of the two latter they shall be permitted to direct their effluent into any sewerage system having a purification system satisfactory to the Provincial Board.

This above order was sent to the secretary-treasurers of Edmonton, Calgary, Medicine Hat, Lethbridge, Wetaskiwin, Strathcona, Stettler, Macleod, Red Deer, and also to the managers of J. Y. Griffin Co., Edmonton, and P. Burns Abattoir Co., Calgary.

To date certain plans and specifications for the installation or extension of water or sewerage systems have been submitted to the board, as called for under sections 11 and 12 of the Public Health Act, and upon the approval of the board certificates have been issued to the following cities and towns, viz: Gleichen, Camrose, Medicine Hat, Wetaskiwin, Lethbridge, Ponoka, Macleod, Olds, Cardston, Calgary, Carmangay, Claresholm, Red Deer and Canmore.

The following are the number of cases of contagious and infectious disease, respectively set opposite their names, which have been reported at this office for the year:

Typhoid fever	665
Smallpox...	81
Chickenpox	212
Diphtheria...	179
Scarlet fever	1,003
Measles...	673
Erysipelas.	59
Tuberculosis	48
Mumps...	17
Whooping Cough	56
German measles.	66

Elsewhere will be found the usual mortuary statistics. A different method of classifying and recording these diseases for the various cities, towns and villages, and outlying districts will be made necessary this year due to the change in the regulations which deal with the reporting of all notifiable diseases.

To date thirty-four permits for disinterment and removal of corpses have been issued.

The reports of the Provincial Medical Inspectors, namely, Doctor Barrow and Doctor Norman, are as follows:

Edmonton, December 31, 1911.

To DR. L. E. W. IRVING,
Provincial Medical Officer of Health.

Owing to the great increase of office work much of my time has been spent at the office, and I have consequently done far less travelling through the country during the year 1911 than during the three preceding years.

Below is a list of the places visited and the purpose of the visit:

DATE	NAME OF PLACE	NAME OF DISEASE
Jan. 12-13	Carbon	Scarlet Fever.
16	Edmonton	Destitute case.
17	Clover Bar Mines	Typhoid.
18-19	Vegreville	Inspection of general health. (Diphtheria.)
27	Edmonton	Destitute cases.
Feb. 1	Edmonton.	Destitute cases.
2	Strathcona	Scarlet Fever.
8-10	Edmonton.	Destitute case.
Mar. 2	Blairmore ...	Smallpox.
3	Coleman..	Sanitation.
9	Millet.	Smallpox.
13	Bickerdyke	Sanitation.
14	Edson.	Sanitation.
15	Prairie Creek	Smallpox.
16	Edson	Sanitation.
31	Blackfalds.	Scarlet Fever.
April 1	Blackfalds	Scarlet Fever.
July 4	Cooking Lake	Scarlet Fever.
5	Millet	Scarlet Fever.
7	Cooking Lake	Scarlet Fever.
12	Carstairs	Scarlet Fever and Diphtheria.
13	Calgary	Inspection of general health.
13-14	Bassano	Smallpox.
21	Morinville	Sanitation.
Aug. 9	Bassano	Sanitation.
10	Strathmore	Sanitation.
11	Medicine Hat . . .	Smallpox and Typhoid.
12	Irvine	Diphtheria.
21	Cooking Lake	Scarlet Fever.
22	North Edmonton.	Scarlet Fever.
23	North Edmonton	Scarlet Fever.
Oct. 5	High River	Scarlet Fever.
6	Lethbridge	Typhoid Fever.
6	Raymond	Smallpox.
7-9	Lethbridge	Typhoid Fever.
April 3	Calgary	Inspection of general health.
4	Carbon	Measles.
7	Viking	Sanitation.
10	Blackfalds	Scarlet Fever.
11	Red Deer	Inspection of general health.
11	Blackfalds	Scarlet Fever.
12	Lacombe	Inspection of hospital.
13	Edmonton	Inspection of isolation hospital.
18	Blackfalds	Scarlet Fever.
19	Irvine	Diphtheria.
19	Medicine Hat	Inspection of hospital.
20	Bow Island	Scarlet Fever.
22	High River	Inspection of hospital—Smallpox.
24	Red Deer	Inspection of isolation hospital.
May 3	Vermilion	Destitutes.
4	Vegreville .	Inspection of hospital.
11	Lethbridge	Inspection of Galt hospital.
11-12	Burdette	Scarlet Fever.
12-15	Bow Island	Scarlet Fever.
Oct. 10-12	High River	Smallpox
Nov. 3-4	High River	Smallpox.
5-7	Lethbridge ..	Diphtheria.
7-8	High River	Smallpox.
18	Coronation School Dist .	Diphtheria.
Dec. 12-15	Lumber Camps	Smallpox.

V. E. BARROW, M.D.,

Provincial Medical Inspector of Health.

Edmonton, December 31, 1911.

TO DR. L. E. W. IRVING,
Provincial Medical Officer of Health.

I beg herewith to tender my report for the nine months of the present year, since assuming my duties.

Infectious diseases were more or less prevalent throughout the year.

Measles became quite widespread among the Galicians in the district lying north of Lamont, due to non-reporting and general ignorance of the laws of this province, but once we were apprised of it active measures soon staniped it out.

Smallpox in the south has given considerable anxiety, but here again stringent measures have had the desired effect, and the disease kept from becoming alarmingly epidemic. I might state that smallpox, according to United States reports, is extremely prevalent there, especially in some of the northern states, and there is no question in my mind, after personal enquiry and investigation, that the great source of the spread of this disease, in this province, is due in a large measure to importation from the United States, such for instance is the history of the outbreak at Cardston and other southern districts.

Quite a little outbreak of that not common disease, *Anterior Polio²Myelitis*, made its appearance at Red Deer, but the establishment of proper measures and the activity of the local board stamped out the disease; several cases resulted fatally however. There was also a limited epidemic at Cardston, and sporadic cases elsewhere.

Scarlet Fever, as might be expected, gave us some trouble in the earlier season, as has also *Diphtheria*, which of late seems to be well in check.

Typhoid Fever has given its usual autumnal troubles, but outside of a few places this disease seems to have been less in evidence in epidemic form than usual, its distribution being pretty general.

The following are the places visited by me during the nine months in connection with infectious diseases and other matters:

Smallpox.

Brooks	May 7.
Pakan	June 13 and 14.
Taber	June 27.
Raymond.	June 28.
Seven Persons	July 26.
Bassano.	July 28 and 29.
Hutton	July 30.
Bassano	September 2 and 3.
Stirling	September 8.
Raymond	September 9.
Strathcona	September 10.
High River	October 17, 18 and 19.
Cardston	October 20.
High River	October 21, 22, 23 and 31.
High River	Nov. 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13.
Mannville	November 14.
Kitscoty	November 15.
High River	November 17, 18, 19 and 20.
Magrath	November 21 and 22.
Leaman	November 29.
Bassano	December 5 and 6.
Gleichen	December 7 and 8.
High River	December 9 and 10.
Gleichen	December 12.

Scarlet Fever.

Blackfalds	April 1, 3, 10, 13 and 18.
Bow Island	April 20.
Calder	April 26.
Leduc District	April 28, 29 and 31, May 2 and 3.
Bow Island.	May 5 and 6.
Leduc District	May 8, 9, 10 and 16.
Elk Point	May 30 and 31, June 1, 2 and 3.
Stony Creek	June 18 and 19.
Elk Point	June 23 and 24.

Bow Island	.June 28.
Stony Creek	.July 15 and 16.
Millett...	.July 21 and 22.
Bow Island	.July 27.
Millet...	.August 1.
Ardrossan	.August 2 and 4.
Belmont	.August 7.
Lamont	.August 23.

Diphtheria.

Carbon.	April 3.
Irvine.	April 18 and 19.
Airdrie	.May 22.
Athabasca Landing	.June 19.
Carstairs.	.July 25.
Irvine.	.July 28.
Mundare	August 19, 20, 21 and 29.
Lethbridge	September 7
Chipman.	October 7, 13 and 27.
Lethbridge	October 30.
Coronation	November 28.

Measles.

Pakan District	May 13, 14 and 15.
Smoky Lake.	June 15 and 16.
Skaro District	August 24, 30 and 31.
Myrtle Creek	{ September 16, 17, 18, 19 and 20.
Whitford	
Leduc.	September 23.
Skaro and Myrtle Creek.	October 5 and 6.
Leduc	October 9.

Typhoid Fever.

Bowell	July 27.
Leduc.	September 6.
Carlstadt.	September 28 and 29.
Leduc	October 10.
Carlstadt	October 29.

Anterior Polio Myelitis (Infantile Paralysis).

Red Deer	.September 25 and 26.
Red Deer	October 3 and 4.
Pincher Creek	October 24.

Sanitation.

Viking	April 7 and 8.
Lamont	May 13.
Acme...	May 25.
Elnora.	.June 8 and 9
Bow Island.	June 28.
Mountain View	.June 30.
Bellevue	.July 12.

Destitutes.

Mrs. Maddens	.Edmonton District	May 2.
James Porter	.Edmonton District	June 5.
Fred Green..	.Trenville	.June 29.

Slaughter Houses and Piggeries.

Copp's Piggery	.East of Edmonton	May 2.
Puffer's Slaughter House	.Lacombe	.July 31.
Rosslyn Piggery	.Edmonton	.Sept. 15.
Western Meat Company	.Calgary.	.Sept. 27.
Slaughter House	.Calgary.	.Sept. 27.

Hospitals Visited.

Pakan.....	May 13.
Edmonton, Isolation.	May 20.
Holy Cross, Calgary	May 23.
General, Calgary.....	May 24.
Salvation Army, Calgary	May 24.
Trochu.....	June 7.
Athabasca Landing..	June 19

T. J. NORMAN, M.D.,

Provincial Medical Inspector of Health.

II.—HOSPITALS.

From January 1, 1911, the grant to the hospitals has been 35 cents for each patient, instead of 50 cents for non-paying patients and 25 cents for paying patients. On the whole this arrangement has been more satisfactory from the standpoint of the hospital management, and has greatly simplified the work of inspection.

The following is a list of those hospitals that are in receipt of public aid, those marked with an asterisk are newly opened hospitals and have this year received the grant for the first time:

HOSPITALS	LOCATION	NO. OF PATIENTS	NO. OF DAYS' TREATM'T
Macleod General....	Macleod	230	2,921
Medicine Hat General.	Medicine Hat. . . .	901	15,917
Pincher Creek Memorial	Pincher Creek.	255	2,876
Red Deer Memorial	Red Deer.	327	2,818
Edmonton City . . .	Edmonton.	846	16,332
Galt General	Lethbridge	972	19,807
Holy Cross	Calgary....	2,321	32,067
General Hospital.	Lacombe	116	2,147
General Hospital.	Edmonton.	1,589	27,564
General Calgary	Calgary	2,956	44,483
Misericordia.....	Edmonton	1,156	21,420
R. M. Boswell Hospital	Vegreville	178	3,924
General Public..	Strathcona	242	3,522
Salvation Army.	Calgary. . .	105	7,392
Isolation Hospital	Edmonton	335	6,046
Geo. MacDougall	Pakan.	266	1,281
Scandinavian Hospital	Wetaskiwin	193	2,328
Public Hospital	Bawlf.	405	4,535
Providence General	Daysland.	322	4,619
Municipal Hospital	Camrose.	154	2,144
Isolation Hospital	Calgary	367	6,584
*St. Joseph's	Grouard..	74	1,416
*High River General .	High River	315	2,155
*St. Mary's	Trochu	22	544

III.—CHARITY AND RELIEF.

To date there has been expended \$5,152.18 in the relief of cases of poverty and destitution. Applications for such relief (totalling 144) have been received from the following places:

Alsask, Sask.	Cardiff.	Stettler.
Medicine Hat (3).	Chipman.	Manfred.
St. Albert.	Cadogan.	Trochu.
Minda (3).	Pincher Creek.	Trenville.
Endiang.	Prague.	Bentley.

Tofield.	Vermilion (3).	Magrath.
Calgary (3).	Cowley.	Vegreville (20).
Naughton Glen.	Lac La Biche.	Crowfoot.
Taber (2).	Coleman.	Blairmore.
Wabamun (4).	Bentley.	High River.
Edmonton (26).	Carbon.	Coutts.
Garden Plains.	Junkins (2).	Lacombe.
Picardville.	Leduc (2).	Bruce.
Noyes Crossing.	Castor.	Strathcona.
Duvernay (2).	Lamberton.	Smoky Lake.
Prairie Creek.	Ponoka.	Paradise Valley.
Edison.	Berry Creek.	Lac St. Anne.
Wetaskiwin (3).	Vallejo.	Pakan (3).
Irvine.	Daysland (2).	Tofield (2).
Midnapore.	Edson (2).	Fishburn.
New Dayton.	Livingstone.	Carlstadt (2).
Sacred Heart.	Carbon.	Viking.
Markerville.	Fort Trail.	Wahstao.
Provost (2).	Gleichen (2).	Lethbridge (2).
Bow Island (2).	Fisher Home.	Millet.
Calmar.	G.T.P. Camp.	Macleod (3).
Kinsella.		

IV.—INCURABLES.

The Home for Incurables at Medicine Hat has admitted five incurable (destitute) patients during the year 1911, and there are now ten inmates who remain in that institution at the expense of the government.

L. E. W. IRVING, M.D.,
Provincial Medical Officer of Health.

10.—REPORT OF THE PROVINCIAL SANITARY ENGINEER.

SIR,—I have the honour to submit the following report on the work of the branch for the year 1911.

During the year plans and specifications were submitted to and examined by the writer, and the Provincial Board of Health advised to issue certificates to the following cities, towns, etc., in connection with their various works which are as follows:

WATERWORKS.

New works—Camrose, Olds, Cardston, High River and Camangay.

Extension of existing works—Red Deer, Macleod, Calgary, Claresholm, Canmore Coal Co., Ltd.

SEWERAGE.

New works—Camrose, High River and Ponoka.

Extension of existing works—Red Deer, Medicine Hat, Macleod and Calgary.

SEWAGE DISPOSAL.

New works—Gleichen, Camrose, Wetaskiwin and Lethbridge.

New site—Calgary.

The following reports and extracts from reports of the various engineers representing the cities and towns of the province show the progress which is being made in the installation of waterworks, sewerage works, etc.

EDMONTON.

The waterworks department has, during the year, had considerable trouble with the system, owing to a number of breakdowns at the pumping station. These are now being overcome by the installation of a new turbine pump directly connected to a steam engine.

We have also had considerable trouble with the filter system, which will also be eliminated this spring by the installation of four additional units of five hundred gallons capacity each, and also a guarantee from the manufacturing company to place the whole plant in proper condition and operate same to the satisfaction of the city.

To show the comparative growth of the water system of this city since 1903 I am giving below a statement showing the increase in revenue, number of services and hydrants during these years.

Comparative Statement Showing Growth of Waterworks Department from 1903 to 1911.

YEAR	REVENUE	NO. OF SERVICES	HYDRANTS
1903 (6 months)	\$ 2,116.32	103	50
1904	13,145.96	223	60
1905	23,414.53	405	101
1906	37,498.19	857	102
1907	55,444.16	1,925	160
1908 (11 months).	49,633.67	2,520	200
1909	59,734.96	3,125	242
1910	76,167.96	3,824	258
1911	117,768.89	4,736	287

With reference to the septic tanks owned and operated by the city, I will say that the present tanks have been operated during the year by this department and have given according to our man in charge, satisfaction. The effluent from the tanks has been fairly clear and free from solid matter.

The total mileage of sewers in the city comprises 47.537 miles of pipe sewer, and 3.2 miles of trunk sewer.

The waterworks department have had installed during the year, the following mains, valves, hydrants and services:

Distribution.—30,068 feet of mains have been laid during this year. The total length of mains in use in the city to date is 60.69 miles.

Stop Valves.—The number of valves placed in position is 48. The total number of valves in use in the city to date is 560.

Hydrants.—During the year 29 steamer hydrants were installed. The total number of hydrants in use in the city including private hydrants is 287.

Services.—The number of water services installed during the year is (a) on application, 854; (b) before pavement, 58; total, 912.

The number of sewer services installed during the year is (a) on application, 790; (b) before pavement, 58; total, 848.

Total number of services in city on October 31: Water, 4,736; sewer, 4,411; total, 9,147.

MEDICINE HAT.

The city of Medicine Hat is situated on the main line of the C.P.R., 660 miles west of Winnipeg. The South Saskatchewan river flows through the city and is its source of water supply.

Waterworks.—In 1898 this city became incorporated and in 1900 made the first installation of a water supply system, installing a pumping capacity of 1,200,000 gallons per 24 hours. At this time coal was used as fuel. Later with the discovery of natural gas the fuel was changed. In 1906 the city installed a mechanical filtration plant, using alumina sulphate as a coagulant. This plant, until its capacity was exceeded, proved sufficient and gave a good domestic supply. About the same time a 500,000 gallon standpipe was installed on the hill to the south of the city, increasing fire protection, and giving a good domestic pressure in the higher levels. In 1907 the pumping station was again enlarged, two gas units being installed and belted to two centrifical pumps of 750,000 gallons each. The gas engines were four cycle engines of 100 B.H.P. The old steam machinery was retained as auxiliary plant. Last year the city installed a 100-horse-power motor in connection with the centrifical

pump and increased the capacity of the pump 250,000 gallons per day. This was done only as a temporary expedient, as it was realized that in 1912 a larger and more comprehensive plant would have to be installed. With this in view the city obtained a site two miles up the river, upon which it is proposed to instal an entirely new pumping station, and to instal on hills lying to the south of the city a reservoir having a capacity of at least 30,000,000 gallons. At the present time there are some $17\frac{1}{2}$ miles of water mains in the city, and approximately 1,700 water services.

Natural Gas.—In 1902 natural gas was discovered in large quantities under the city. This gas lies in three stratas, the first being 125 feet below the surface, and carries with it a certain amount of moisture. This gas is found at a pressure of about 125 pounds. The second strata is found at 625 feet below the surface, and at a pressure of 260 pounds. This also carries moisture with the gas. The third and valuable strata is found between 1,000 and 1,100 feet from the surface. This gas is at 580 pounds pressure, and carries no moisture. The analysis of the gas is as follows:

Methane	99.49
Hydrogen. . . . .	.51
Oxygen.	a trace.

Since the discovery of the gas the field has been found to extend 100 miles east and west and 50 miles north and south, although gas has been found further north. Each 1,000 foot well delivers on an average 3,000,000 cubic feet of gas per day, and the city has six of these now in operation, in addition to which two wells have been drilled and turned over to large manufacturing industries as bonuses. The pressure of the wells is reduced by regulators and the gas is distributed throughout the city and sold at fifteen cents per 1,000 cubic feet, to the domestic consumer, and five cents per 1,000 cubic feet to manufacturers. Approximately 15,000 cubic feet of gas is equivalent to one ton of western coal, and from a manufacturer's standpoint this is equivalent to coal at .75 delivered on the grate bars.

Sewerage.—The city has inaugurated a system of sewerage based upon the separate system principle. Seven miles of domestic sewers and two miles of storm sewers have been constructed. At the present time the sewage flows by gravity into the river, and at high stages it is pumped to the river from the mains by centrifical pumps operated by gas engines.

Paving and Sidewalks.—To date no permanent pavements have been constructed but the city now has fourteen miles of concrete sidewalks, and about four and a half miles of plank sidewalks and about six miles of macadamized streets. It is the intention during next year, to make a start at paving. A traffic subway is now being considered under the C.P.R.

Electric Light.—During 1911 an electric light plant was constructed at an expense of \$60,000. This plant consists of two four-cylinder vertical Crossley engines, directly connected to alternators of 125 kilo watts each. Approximately six miles of distribution line has been erected to date and will be materially added to during 1912.

During the past year new buildings to the value of \$780,000 have been erected as compared with \$208,000 constructed during 1910.

A municipal store-house has been erected and all supplies will be handled through a purchasing department. All work of an ordinary nature is executed on the day labour basis. The engineer's office consists of two separate branches—the construction department and the engineer's office proper. Under these departments the city has been enabled to save money besides maintaining a very high standard of work completed.

RED DEER.

Waterworks.—Red Deer takes its supply of water from the Red Deer river on the up river side of the town. The intake consists of an outer basin in the bed of the river and an intake basin with filter beds on the outer sides so that the water is all filtered before being pumped into the distributing mains. The town has installed two 10 inch by 18 inch by 10 inch by 18 inch compound steam pumps made by the Snow Pumps Co. of Buffalo. These have each a capacity of 1,000,000 gallons per day. They are supplied with steam from three large boilers and are so arranged as to operate either singly or together and from any one of the three boilers. A jet condenser is also used for greater efficiency.

The water mains consist of six inch, eight inch and ten inch pipes, wooden, cast iron and steel. The system consists of about six and one-quarter miles of mains of which two and one-half miles were laid this year. This includes a duplicate main from the power house to the principal distributing point, so that in case of a breakdown of either pump or any of the mains or boilers the system can still be operated.

The efficiency of the system is shown by the fact that since the first system there has never been a breakdown of any kind during a fire, and in 1911 with sixteen fires the fire loss amounted to only \$2,175. Red Deer enjoys the lowest fire insurance rates of any town in Western Canada.

During 1911 land was secured for a site for a stand pipe which will be erected on the hill to the east of the town, opposite the Presbyterian Ladies' College.

Sewers.—The sewer system is built almost entirely of vitrified pipe, though some cement pipe has been used in the smaller sizes. The sizes range from four inches to eighteen inches, the latter size being the main sewer to the outlet. There is about four and a half miles of sewer laid of which about one mile was laid this year.

The outlet is down the river below the town, the town having purchased about two acres of land for disposal works. The construction of these disposal works was commenced this year but on the permit of the Provincial Board of Health the work was left over until 1912 for completion.

Cement Sidewalks.—About one and three quarters of a mile of these have been laid during the past two years, about one mile being laid this year. The walks are ten and a half feet wide on business and six feet on residential streets and are complete with curbs and gutters, catch basins being laid to the sewers to furnish proper drainage.

Street Grading.—Much grading was done this year on the principal streets. The business streets have been brought to grade and gravelled and properly drained. During the summer these are sprinkled by means of a water cart and the rubbish removed regularly. On 3rd and 4th Streets North-East boulevarding has been done and in 1912 much more of this work will be done.

Parks.—Red Deer owns about eighty acres of parks, some of which have been improved. The Park Superintendent of Calgary was engaged to lay out the principal ones and he is preparing plans for permanent improvements. It is likely that in 1912 the town square will be laid out and children's playground apparatus purchased and erected.

Drinking Fountain.—A sanitary drinking fountain has been erected on the main street and has been largely used during the summer by people, dogs and horses. The approach to this from the street side is built of concrete properly drained to the sewer and the part used by people has a continuous flowing mouth piece.

The amount spent on waterworks, sewers, parks, etc., to date is over \$200,000.

LETHBRIDGE.

Waterworks.—The present equipment at the pumping station includes one reciprocating steam pump of 2,000,000 capacity, two six-inch turbine pumps, and two six-inch fire pumps.

There are two force mains leading to stand pipes, one having a ten inch cast iron, and the other a twelve-inch wooden force main. Stand pipes are each eighty feet high, and located on eminences, and giving pressure in the business part of the town from thirty-five to forty pounds. The total length of water mains is 32.70 miles, including two force mains.

Such analyses of the water as we have been able to get show a low count of bacteria and an absence of colon bacilli.

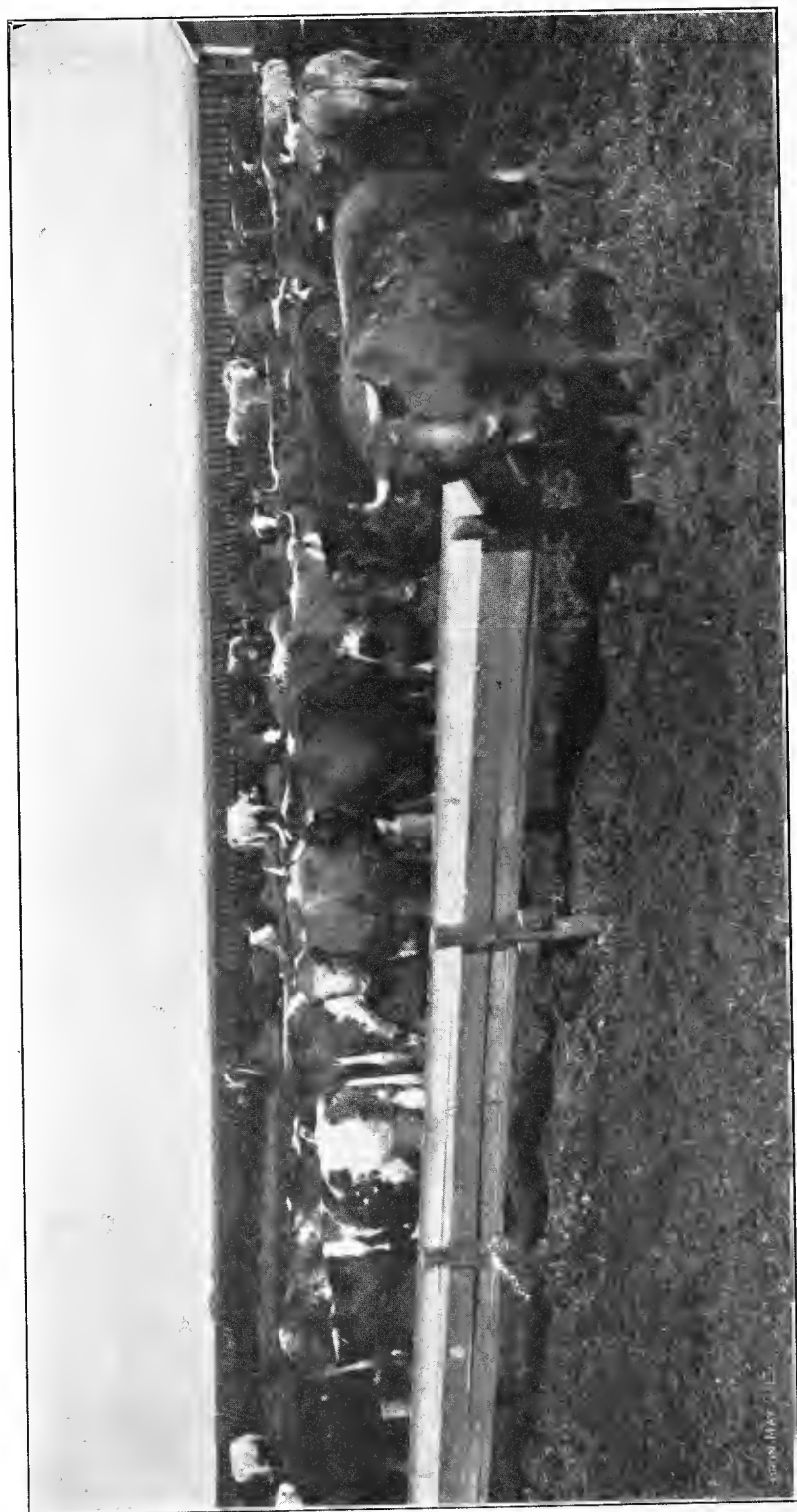
Sewerage.—The total length of sewers is 20.8 miles, including three outfalls which converge to a single outlet before discharging into the river. The system has been working well throughout the year, and has given no trouble.

STRATHCONA.

Sewers.—Eight inch tile constructed during 1911, 15,380 feet; 10-inch tile, 2,893 feet; 12-inch tile, 1,118 feet; 24-inch tile, 8,000 feet, making a total of 27,391 lineal feet of sewers constructed, or 5.19 miles. There were 869 feet of 8-inch tile, C.B. connections, 48 manholes constructed, 22 catch basins constructed, and 267 6-inch house drains (11,445 feet) laid.

Waterworks.—Six-inch mains constructed during 1911, 15,600 feet; 8-inch mains, 3,490 feet; 12-inch mains, 2,512 feet, making a total of 21,602 lineal feet of water mains constructed, or 4.09 miles. There were 13 hydrants and 68 gate valves set in place, 100 plumbing permits issued, 267 water services (11,404 feet) completed, and 13 6-inch hydrants (390 feet) branches.

Surface Water.—Forty-three box drains 8 inches by 10 inches, and 11 box culverts 2 feet by 2 feet six inches constructed.



HAY-RACKS AND FEED-TROUGHS USED BY STEERS ON WINTER FEED AT DEMONSTRATION FARM, OLDS.

Comparative Statement in Miles of Work Done During the Years 1905-1911.

YEAR	SEWERS	WATER MAINS
1905	1 25	1.12
1906	3.47	3.36
1907	58	2.65
1908	2 55	1.82
1909	1 95	3 14
1910	2 84	3 03
1911	5 19	4.09
Totals	17 83	19 21

MACLEOD.

Macleod has added two miles of six inch cast iron water mains to its system this year, also seven hydrants. The old part of the system is wooden pipe and is giving great trouble through leakage, etc. As far as regards operation, water supply, etc., it is in first class condition.

Three miles have been added to the sewerage system. There is approximately one hundred and ten connections made to this system, also twenty-four catch basins. This system is working perfectly satisfactorily, but no sewage disposal plant has yet been constructed.

The town has also laid a twenty-inch wood pipe line from the old water intake to a point two hundred and seventy feet higher up the Old Man River. This gives a better supply of water to the pumps during low water and removes all danger which may have existed owing to the hospital being in the vicinity of the old water intake.

The town is taking steps to make connections to the sewerage system compulsory.

CAMROSE.

Waterworks.—The system as designed by the engineers embodied the use of deep wells as the source of water supply. The selection was aided by the fact that artesian water is found at Camrose, one well in particular raising the water fifteen feet above the ground level. A compressed air system of lifting the water was chosen, the water being delivered to an underground reservoir of 150,000 gallons capacity.

The distribution system involved the installation of 24,000 feet of cast iron water mains, the use of nothing smaller than six inch being contemplated.

An elevated steel tank of 100,000 imperial gallons capacity on a steel tower 100 feet above the highest point of the town has been installed. A multi-stage turbine pump, engine driven, is provided to raise the water to the tank, or to be used for fire protection. Hydrants are installed at all the principal corners.

Sewer System and Sanitary Work.—The sewer system as designed comprises the installation of some 18,000 feet of vitrified clay sewer pipe, eight inch being the smallest size used.

Disposal Tank.—After thorough investigation the engineers decided upon the use of a sedimentation and sterilization method of disposal as designed and patented by R. B. Owens, B.A., B.E., this appearing eminently suitable to the climatic and local conditions

and having the further advantage of being economically constructed and operated. This is located on Stoney Creek, about one mile south of the town.

Owing to the exceedingly bad weather throughout the season and the scarcity of labour which accompanied the harvest season, it was not found possible to make enough house connections to warrant the operation of the system during the winter. It was, therefore, deemed advisable to suspend the completion of the works until spring.

As the situation now stands the work as designed is practically completed with the exception of the disposal works. The total expense to date being, in round figures, \$80,000, with a balance of \$20,000 still available from the \$100,000 provided by the ratepayers. With good weather, two months' work in the spring will place the system in operation. When completed, Camrose will be supplied with three lines of railroads, electric lights and sewer and water supply—practically everything desired for comfortable living.

CALGARY.

Waterworks.—198,976 lineal feet of water mains of various sizes have been laid during the year. This exceeds the amount laid in the preceding year by 100,923 lineal feet. The total length of mains of various sizes in use in the city is 107.77 miles.

House Services (water connection).—The number of house services laid during the year was 2,596, being an increase of 829 over last year. This department has been exceedingly busy throughout the year; besides the ordinary house service 13 stand pipes, 76 boulevard taps, 11 taps in Victoria Park stables, and 142 connections were changed from lead to iron.

Reservoir.—The reservoir which was partly concreted last year is in first class condition consistent with present requirements, but the bottom and sides being the natural earth should be lined throughout, as a certain amount of seepage is apparent, which can be remedied by properly lining the whole reservoir.

Pumping Station.—The waterworks department has just installed a five million gallon electric pump supplied by the J. Ingles Co. The pump has not been tested, and therefore not finally accepted. The pumping station has been undergoing some repairs and slight extensions owing to the installation of the new electric pump, and will need to be repainted and thoroughly renovated.

Gravity Intake.—At the gravity intake new and enlarged screens and filters have been put in which has to a great extent kept back the needle ice from getting into the well. The water has only been shut off temporarily for a few hours at a time on several occasions for minor repairs—everything is working very satisfactorily.

Waste of Water.—Unfortunately there seems to be quite a waste of water somewhere in the city, and I should recommend that a certain amount be appropriated so that a thorough examination of all mains and house connections can be made to detect the possible underground leakage, together with a systematic inspection of service supplies, throughout the city.

Sewers.—During the year 33.1 miles of sewer was laid, which is greatly in excess of that laid the previous year, and is owing chiefly to the demand for sewers in the recently added territory. The cost per foot will be slightly higher than in previous years, owing to the

greater depth, increased cost of material, labour, and the haulage which is further away from the yard. The labourers, at certain periods, were rather difficult to get.

Concrete Trunk Sewer.—Tenders were called for a six foot trunk sewer the early part of the year; about a dozen contractors put in bids ranging from \$14.72 to \$22.00 per lineal foot, the lowest tender being the James Mitchell Construction Co. Work was commenced about the middle of August, but slow progress has been made. The work was closed down on the 25th November on account of cold weather, except tunnel work under the C.P.R. tracks and under 9th Avenue and 8th Street E.

A relief concrete trunk sewer was constructed by day labour from the Elbow River along Ninth Avenue and First Street East, to connect the present sewer on Third Avenue, a total length of 3,572 lineal feet, also a concrete sewer north of the Bow River to drain the newly added extensions on the north hill.

Catch Basins.—The number of catch basins installed during the year was 304, being 71 in excess of the number put in in 1910. The contractors were the Crown Paving Co., price paid \$15.90 each, being \$1.00 less than last year's price.

House Sewer Connections.—During the year 1,977 sewer connections were made, an excess of 612 connections over the amount last year. This necessitated an increased number of labourers to keep pace with the number of connections to be made.

Sewer Flushing.—All the principle sewers have been flushed at regular intervals, and in addition to this there are quite a number of automatic flush tanks which flush the sewers several times a day. Owing to the increased number of sewer mains and private connections to look after, it will necessitate a large amount of expense during the coming year which should be provided for out of estimates.

The following table gives a good idea of the comparative increase of work from year to year under the various headings:

	1911	1910	1909	PREVIOUS TO 1908	TOTAL
Sewers	33 1 mil.	24 53 mil.	12 miles	32 miles	101.63 mil.
Water mains	37.7 "	18.57 "	13½ "	38 "	107.77 "
Hydrants	245	223			560
Water connections	2,596	1,767			
Standpipes	13				
Boulevard taps..	76				
Victoria Park taps	11				
Sewer connections	1,977	1,365			
Curb and Gutter	110,156 feet				
Catch basins	304	233			
Manholes	398	285			
Conduit.	47,789 lin. feet.				9 05 miles
	239,850 duct. feet.				45.424 "

As to condition and operation, everything is satisfactory. The refuse destructors are not as yet complete, so we cannot furnish information as to their operation.

We have just installed a five million gallon electrically driven pump. This, with the other pumps in place, makes a total pumping capacity of ten million gallons. This is simply an auxiliary to the gravity system and an extra security in case of big fires, etc.

WETASKIWIN.

Waterworks System, Watermains.—These have given very satisfactory service during the year; have only had to repair one leaky joint on the entire system. They also stood the frost test well as we did not have a frozen main nor service pipe, which, considering the severity of the past winter I consider very fortunate; mains being laid at a depth of seven and one-half feet.

Hydrants.—These are Mathews type equipped with frost cases made by the R. D. Wood Company of Philadelphia and have given entire satisfaction even during the most severe weather.

Elevated Tank.—This tank, erected by the Ontario Wind Engine and Pump Co., is 112 feet high to the balcony and total height is 140 feet. It has a capacity of 120,000 gallons and the riser and overflow pipes are enclosed in a wood casing with adequate air spaces. Notwithstanding the fact that we had no fire in this tank it withstood the frost of the winter months without showing more than a slight skim of ice upon a few occasions during the most severe weather.

Ground Reservoir.—This reservoir is of reinforced concrete, capacity 212,000 U.S. gallons, having a timber roof with air space of about one foot, then finished with tar and gravel. It gave satisfactory service being entirely frostproof, and requiring no attention except an occasional flushing out; provision for which is made by a trapped drain to the sewer.

Wells.—There are three of these, respectively 238, 240 and 247 feet deep and they are pumped to the ground reservoir by the Harris Air Lift System, power for which is supplied by an electrically driven air compressor with a rated capacity of 225 cubic feet per thousand. During the months of January, February and a part of March the wells did not supply the usual amount of water, partly due I believe to a lack of power. We expect to have an additional unit installed next year, which I trust may remedy this trouble.

Sewerage System.—These, as a general rule, have given satisfactory service, although some of the laterals, being laid to quite a flat grade, require frequent flushing. In the case of one or two laterals on the east side of the town, we had great difficulty in keeping them from freezing up altogether, partly owing to their being rather shallow and partly from the fact of there being so few services connected, also the shortage of water at this time not allowing sufficient flushing. We hope to overcome this difficulty as our number of consumers for water increases and also when the streets in question are brought to the proper grade.

Disposal Works.—This plant known as "The Live Earth Bed System," designed by Mr. R. B. Owens, is in course of construction and we had expected to have same working this coming winter, but owing to a delay in procuring the automatic valves and syphons we had to ask for an extension of time until May, 1912, when we hope to have the plant completed and in running order.

Consultations with reference to many of the works before mentioned were held with officials of the various cities and towns, and with those of the general public who sought information on the different subjects coming under the jurisdiction of the writer.

Respectfully submitted,

R. B. OWENS,
Provincial Sanitary Engineer.

11.—REPORT OF THE DIRECTOR OF THE PROVINCIAL LABORATORY.

SIR,—I have the honour to present a report regarding the work of the Provincial Laboratory for the year 1911.

COMMUNICABLE DISEASES.

The work relating to public health includes examinations of specimens to assist in the diagnosis of pulmonary tuberculosis, diphtheria and typhoid fever. The numbers and results of which are shown in table 1.

TABLE I.

SPECIMENS EXAMINED FOR DIAGNOSIS OF INFECTIOUS AND CONTAGIOUS DISEASES.

DISEASE	No. of specimens	RESULTS		Specimens sent from No. of		NUMBER RECEIVED EACH MONTH		
		Neg	Pos.	Phy'ns	P.O.	Typhoid	Diph.	Sputum
Typhoid Fever	190	152	38	133	26	Jan 16	87	24
						Feb 11	18	24
						Mar 11	39	27
						April 11	41	28
						May.. 9	46	31
Diphtheria	406	323	83	183	35	June 7	1	26
						July.. 12	24	22
						Aug. 36	20	15
						Sept. 49	15	20
						Oct 9	36	16
Pulmonary Tuberculosis	266	206	60	220	40	Nov. 14	56	19
						Dec . 5	25	15
Totals. .	862	681	181	536	101	190	406	266

For the convenience of the physicians who avail themselves of the services of the laboratory, mailing outfits are provided by the latter. These are usually furnished through drug stores, which act as supply stations. The supply of outfits can thus be more readily replenished from the laboratory. Whenever requested, however, physicians are supplied direct. At present outfits are kept at the following addresses:

LIST OF SUPPLY STATIONS.

Post Office.	Name.
Airdrie.....	..... Dr. F. W. Edwards.
Banff.....	..... National Park Drug Co.
Bellevue.....	..... Dr. D. C. McKenzie.
Bentley.....	..... Dr. W. G. Evans.
Calgary.....	1. Isolation Hospital.
	2. Oliver Bros. (Druggists).
	3. Wendell McLean (Druggist).
	4. Jas. Findlay (Drug Co.).

Canrose	Dr. Lamb.
Carlstadt	Dr. Mason.
Carmangay	Dr. Bryans.
Carstairs	G. E. Kennedy (Druggist).
Castor	Geo. Brown (Druggist).
Claresholm	O. L. Reinecke (Druggist).
Crossfield	Dr. A. Spankie.
Daysland	J. H. Burrows (Druggist).
Didsbury	H. W. Chambers (Druggist).
Edberg	Dr. McLeod.
Edmonton	1. Edmonton Drug Co.
	2. J. M. Sissons.
	3. Norwood Pharmacy.
	4. Health Department.
	5. Isolation Hospital.
Fort Saskatchewan	Dr. P. Aylen.
Frank	Dr. J. W. McKay.
Gadsby	Dr. H. E. Chatham.
Gleichen	Dr. Wm. Rose.
Hardisty	Eddington Drug Co.
High River	Dr. Stanley.
Innisfail	Mr. Geary (Druggist).
Irvine	Dr. H. S. Ferguson.
Lacombe	N. I. McDermid (Druggist).
Lamont	Dr. A. E. Archer.
Lethbridge	Dr. L. G. De Veber.
Lloydminster	Red Cross Pharmacy.
Lundbreck	Dr. A. C. C. Johnston.
Macleod	R. D. Barnes (Druggist).
Magrath	Magrath Pharmacy.
Medicine Hat	1. Dr. O. Boyd.
	2. General Hospital.
Nanton	Dr. J. A. Creighton.
Okotoks	1. F. R. Brown (Druggist).
	2. J. W. Edmonds (Druggist).
Olds	1. Dr. Little.
	2. Dr. Stephens.
Onion Lake	Dr. Matheson.
Pakan	Dr. C. H. Langford.
Ponoka	Dr. W. A. Campbell.
Pincher Creek	E. J. Mitchell (Druggist).
Prairie Creek	Dr. Meyer.
Raymond	Dr. J. H. Rivers.
Red Deer	Dr. J. Collison.
Shandleigh	Dr. Reavley.
St. Albert	Laval Drug Co.
Stettler	Dunlop Drug Co.
Stony Plain	Dr. R. M. Oatway.
Strathcona	F. Cowles (Druggist).
Taber	Dr. N. Aikens.
Tofield	Hammond Bros. (Druggists).
Vegreville	Drs. Field and Monkman.
Vermilion	F. C. Long (Druggist).
Viking	Dr. G. E. Story.
Vulcan	Dr. Upton.
Wabamun	Dr. C. E. Carthew.
Wetaskiwin	1. Dr. R. D. Robertson.
	2. Humphrey Higgs (Druggist).

WATER ANALYSIS.

There were received and examined in the laboratory 71 chemical and 31 bacterial samples of water. To make it possible to understand the analytical findings it is in every instance necessary to have a description of the source of the sample, for which purpose I have prepared a blank form. This is sent to every person requesting an analysis. The descriptive blank is at the same time educative in that it directs attention to the essential conditions on which safe water depends. In carrying out an analysis of water it is absolutely

necessary to have a proper sample. Therefore directions and outfits are furnished by the laboratory. As unsuitable samples are frequently sent in, I give below the instructions which should be followed:

DIRECTIONS FOR TAKING AND SENDING SAMPLES OF WATER.

The Laboratory will make examination of samples of water when the results of such examinations are directly applicable to the prevention of disease and the protection of public health. Satisfactory evidence for regarding the water with suspicion must be forwarded when the examination is to help decide whether the water supply is contaminated.

In order that the examination of water samples may be of value, these must be sent in bottles furnished by the Provincial Laboratory, together with full data as asked for in the accompanying forms, and the directions which follow, concerning the inspection of the source of the water, the method of collecting samples, and the details of packing them, must be carefully carried out.

The purpose of these directions is to ensure the obtaining of true samples, and failure to follow them will not only give the laboratory much unnecessary trouble, but will likewise make it difficult, and sometimes impossible, properly to interpret and understand the analytical results.

The tests applied to the sample in the laboratory are exceedingly delicate and exact, but can be relied upon only when the sample is taken strictly according to directions.

Proper data regarding the source of the sample are absolutely necessary to interpret or understand the laboratory examination, and the questions must therefore be answered accurately and fully in so far as they apply to the source of the sample you are sending.

The report on the examination will be the conclusion based upon a consideration of all ascertained facts, and its value will depend on the accuracy and completeness of the statements in answer to the questions concerning the conditions existing about the water supply.

If several samples are sent, give identification of each and state whether from the same vicinity or same source. State reasons for selection of each sample, and give full information for each, according to directions.

GENERAL DIRECTIONS FOR COLLECTING SAMPLES OF WATER.

The bottles have been rendered chemically and bacterially clean, therefore carefully avoid any contamination in handling or filling them. Especially avoid allowing the fingers or anything else to touch the part of the stopper that enters the neck of the bottle. Do not remove or expose the stopper before all is in readiness for filling the bottle. Do not use sealing wax or other sealing substance. Use a piece of heavy cotton to cover and fasten down the stoppers and protect the mouths of the bottles.

If the sample is taken from a tap first let the water run freely for ten minutes; if taken from a pump, pump out several pails just before taking the sample.

If the sample is taken from a body of water, plunge the bottle rapidly below the surface to avoid the surface water, get it completely full and withdraw quickly. Direct the mouth of the bottle up stream, if there is any current, or move it forward in a straight line if in still water. This is to avoid contamination from the hands or outside of the bottle.

If the sample is taken from a shallow source, avoid disturbing the sediment at the edges or bottom.

Avoid taking the sample too near the edge, surface or bottom. The sample should be as nearly as possible like the bulk of the water it is to represent.

The utmost care must be taken that the fingers do not touch the lower part of the stopper nor the inside of the neck of the bottle.

When possible the sample should be taken directly in the bottle without the use of dipper or funnel. When these are necessary, see that they are absolutely clean, and, before use, are first well rinsed in water from the source to be sampled.

Thoroughly rinse out the bottle by filling it one-third full, shaking it and then emptying it. Do this three times.

Then fill the bottle finally, pour out a little water to leave room for expansion, and cover the stopper and neck of bottle with the cotton securely tied on. The ends of this string may then be sealed.

Ship as soon as possible, by express prepaid, to the Provincial Laboratory, Department of Agriculture, Strathcona, Alberta.

The time of taking samples should be chosen so as to avoid waiting long before shipping. Avoid sending samples to arrive in Strathcona Saturday or Sunday.

There is unfortunately much popular misconception as what should be done in the case of bad or suspicious water. Analyses are usually asked either because of suspicion of the water having caused typhoid fever or because of objectionable taste or physiological effects of the water. *Inspection* is a much quicker and usually more certain method than *analysis*, to ascertain whether the water-source is objectionable or not. If there is just cause to suspect that a well or other source of water is contaminated the water should be avoided or sterilized. Sterilization is easily accomplished either by boiling or, often more conveniently and extensively, by the use of "bleaching powder." The method of using this is as follows:

A SIMPLE METHOD OF WATER PURIFICATION.

A level teaspoonful of chloride of lime (Hypochlorite of Calcium or "bleaching powder") should be rubbed up in a teaspoonful of water. One-fourth of this cupful should then be diluted by pouring it into three-fourths of a cupful of water, or the whole cupful may be mixed with three cupfuls of plain water. A teaspoonful of this diluted solution added to two gallons of drinking water will sterilize it (kill all bacteria) in ten minutes, thus destroying all typhoid and other disease-producing germs that may be in the water. It is therefore quite unnecessary to boil the water. All trace and taste of the chemical will quickly disappear from the water.

This method of sterilization of water is very useful to miners, campers, prospectors, travellers, and to all who use private wells that are not above suspicion. The bleaching powder is cheap and can be easily carried on journeys. The method is not suitable for sterilization of milk.

SEWAGE DISPOSAL.

The great growth in size and number of our cities, towns and villages makes it imperative to have efficient ways of disposal of the sewage from such communities. When these are situated on a river it is the custom to empty the sewage into the latter. This indeed is unavoidable and is very liable to pollute the river and spoil its water for use by other persons or places down stream. Therefore the sewage must be so treated as to make this practice safe, and there are various methods by which this is attempted. Among the most promising of these is one devised by the sanitary engineer of the province. Theoretically and so far as can be judged by appearances at the few small plants installed this system is highly efficient and should be especially welcome to large centres of population owing to the low cost of installation, ease of operation and the readiness with which it may be extended. As yet no investigation in this province has been possible to learn the chemical and bacterial changes which are involved in the process. This work it is hoped may be undertaken at an early date so that we may be in a position to state more exactly the results obtainable.

MILK.

Too much attention is commonly given to the so-called "richness" of milk, that is, the content of butter-fat or cream, to the neglect of its purity.

The laboratory examination of milk when carried out on proper samples is of great value in determining the quality of the milk. For bacterial examination the samples must be as nearly as possible representative of the milk as delivered or consumed. The use of preservatives, skimming, watering or other adulteration can be investigated in samples sent by mail or express. Where possible samples should be packed in ice and full information should precede

or accompany the samples. Not infrequently no information is forthcoming at all, not even the name and address of the sender. In 1911 nineteen milk samples have been examined and reported on.

A serious outbreak of typhoid fever occurred in Lethbridge which reached its height in October. At the request of the Medical Health Officer of that city I investigated the outbreak. The investigation showed that the infection was due chiefly to the use of milk supplied by one dairy. A large majority (about 67 per cent.) of the cases in this epidemic were using milk from this dairy which was furnishing only 15 per cent. of the whole milk supply of the city. The dairy was promptly closed and should not be allowed to resume before it can produce milk that is safe to use.

MEDICO-LEGAL.

A very considerable part of the work of the laboratory relates to the administration of justice by the department of the Attorney-General. In this connection during the current year I have attended several inquests and trials for murder, manslaughter, poisoning, etc. In the preparation to give evidence and also to assist the police, examinations are frequently made in the laboratory. During the year there have been thus far 46 such examinations. The year has shown a large increase in the amount of this work and it will doubtless continue to expand even more rapidly than the population of the province. The importance of this part of our work I regard as almost equal to that relating to prevention of disease. The detection and punishment of crime is necessary for the protection of property, liberty and lives of our citizens. The greater certainty and promptness with which crime is detected the less will be the tendency to lawbreaking. Thus there is the opportunity to prevent crime and, as in disease prevention is better than cure so here, also, it is better than punishment and neither cure nor punishment can undo the mischief wrought.

Analysis of liquors for the liquor license branch of the Department of the Attorney-General was made in forty-six instances to ascertain the percentage of alcohol or the presence of wood-spirits or drugs. In some of these cases it was necessary to attend court and to give evidence on the findings.

DISEASES OF ANIMALS.

Two examinations for the diagnosis of glanders in horses and four for rabies in dogs were made. All were negative. Continued vigilance should be had to prevent rabies getting a foothold in the province. The disease is conveyed almost exclusively by the dog bites. Any dog that has bitten a person should be securely shut up and well cared for for a week. If he is then well no fear need be felt for the person bitten. It is a serious mistake to destroy a dog that has bitten anyone before first proving that the animal is free from hydrophobia.

MISCELLANEOUS.

In April on the request of the Dairy Commissioner of the province I attended at the dairy school held at Innisfail and gave lectures and demonstrations in bacteriology.

In May the laboratory quarters were transferred to the new University Building. Here larger and more suitable space and the availability of gas for the laboratory purposes afford much better facilities for the work.

In June I attended the meeting of the Dominion Medical Association in Montreal. An invitation was extended to the association to hold its next meeting in Alberta. This invitation was accepted and August 10 to 14, 1912, has been set for the convention to be held in Edmonton. The province as a whole will benefit very materially and permanently from this gathering of medical men from all parts of Canada and from other countries.

D. G. REVELL,
Director.

12.—REPORT OF THE PUBLICITY BUREAU.

SIR.—I beg to submit herewith a report of the work performed by this bureau during the year.

The past year has been distinguished by increasing activity in the immigration field. The Canadian Pacific Railway Company report that they alone received 175,000 immigrants from the United Kingdom, that during the month of May 30,000 immigrants were received (about 1,000 per day) and fully 75 per cent. of these newcomers came through to Western Canada. It required 500 special trains to bring these settlers westward.

It is fully expected that not less than 100,000 settlers came to Western Canada this year from the United States, and with them not less than \$1,000,000. The Dominion Government will expend not less than \$1,500,000, and the several provincial governments \$500,000, in carrying out publicity campaigns. This will be supplemented by an even larger sum by the three Canadian transcontinental railway companies; and by the \$250,000 odd which individual towns and cities will add to the fund, the total amount for the year will thus be about \$3,250,000.

Having established offices at Montreal, Toronto, and Winnipeg last year, we were able to successfully meet and influence a very large number of the incoming immigrants to settle in Alberta this year.

The work of the commissioners at their above named centers was supplemented by special commissioners who succeeded in sending us a large number of first class settlers from the United States. The bureau also placed large display exhibits at the following exhibitions during the current year, viz.: The Dominion Exhibition at Regina, Saskatchewan, The Industrial Exhibition at Toronto, Ontario, and the Dry-Farming Congress at Colorado Springs, Colorado. We were successful in securing gold medals at the two former exhibitions and the grand sweepstakes prize, together with some twenty odd individual first prizes at the Dry-Farming Congress exhibition, and with the assistance of the Lethbridge Board of Trade secured the next meeting of this congress at Lethbridge next year.

Our phenomenal success at this great exhibition should be a matter of pride for every citizen, as also it was the best advertising ever accomplished by any province.

As the direct result of the operations of this bureau, ten special excursion trains were organized and run from different points into the province during the months of April and May, carrying not less than 2,500 actual settlers. This great influx of settlers blocked the hotel accommodation at both Calgary and Edmonton to such an extent that the daily press on April 10 stated "that not a hotel in the city could furnish accommodation and the situation threatens to become serious, and there is not a vacant building in the city in which to quarter immigrants. Not a room, nor a dwelling, not a shack of any nature is vacant, and the crowds of new-comers will face the necessity of sleeping with only the stars for a canopy, if the city authorities do not provide accommodation of some nature."

LAND OFFICES CROWDED.

April record in homesteads was 50 per cent. over all others. Nearly 1,000 entries were made in the Edmonton land office alone during the month of April. Every entry was made by some new settler, a recent arrival in the province. Many of these settlers brought families with them and went directly upon the land.

We had the distinguished honour of arranging for the first Grand Trunk passenger train departing from Ontario to run direct through to Alberta via Chicago, St. Paul and Winnipeg. This special settlers' excursion train was accompanied by our Toronto commissioner, and brought not less than 200 settlers into our province.

MONTREAL.

The bureau's work at this point has been very successful and satisfactory during the year. It has been distinguished by the large number of European immigrants directed to our province through its activity, securing in some cases not less than 125 passengers from one steamer.

The commissioner has been very active in meeting incoming immigrant trains, distributing literature and presenting our claims to the new arrivals. His office has a record of having received 2,260 letters of enquiry and sending out 3,120 letters. Five special excursion trains and eleven special parties were organized and sent forward from this office during the present year, and a large number of smaller parties from time to time.

TORONTO.

Three special excursion trains, and nine special parties containing from twenty to fifty settlers each, were organized and dispatched by our commissioner from Toronto this year. These, together with smaller parties from time to time were the direct result of the activities of this office. 1,270 letters of enquiry were received and 1,742 letters were sent forward from this point. Our efforts in Ontario have yielded very encouraging results and we feel justified in predicting a still larger immigration from that province next year than ever before.

WINNIPEG.

Our office at Winnipeg has experienced a very busy year. The personal applications for information in regard to the province became so numerous during the early part of the year that we found it necessary to provide our commissioner with extra assistance, and also again during the early harvest season when we were called upon to furnish nearly 8,000 extra harvest hands for different localities throughout our province. We find that hundreds of settlers stop at Winnipeg before deciding their destination, which provides a splendid field for the operations, and personal work of our commissioner, who has shown himself to be the right man in the right place, as scarcely a day passes without affording us direct evidence of his successful efforts in directing settlers into Alberta. 3,211 letters of enquiry were received and 3,863 letters were dispatched from this office during the current year.

SPECIAL COMMISSIONER, MICHIGAN.

Our special commissioner operating in Michigan succeeded in sending up a special train of first class settlers early in May consisting of 83 adults and their families. Several smaller parties followed later. A large immigration from Michigan may be expected early next year as the result of the practical and official labours of our commissioner in this State.

MINNESOTA.

A special commissioner spent some three months in this State early in the year and succeeded in sending us three special parties of from ten to twenty settlers each. A great many inquiries have also been received as a result of our work in this state, and we believe a large number of first class settlers may be expected to come to us early next year from this locality.

MONTANA.

Special efforts were made in this state during the months of April, May, and June, and a large number of settlers were secured. About fifty settlers left Great Falls for Alberta points, and a great number of smaller parties from time to time since, and the bureau has the assurance that a still greater number will follow early next year.

MISCELLANEOUS.

Our special commissioners were all discontinued after June 1. It is indeed a pleasure to record that we have received many letters from various boards of trade and publicity organizations throughout the province, acknowledging the services of our commissioners in distributing their literature and otherwise rendering valuable and meritorious service.

We have prepared and printed over fifty thousand books, maps, and pamphlets, and distributed in all about seven tons of advertising literature; received 5,366 letters and sent out 6,790 letters. We met and entertained a large number of foreign newspaper and magazine publishers and writers during the past year, notably among which were a large special party from the Old Country, representing most of the more important journals in England, Ireland and Scotland, who toured the western provinces with a special car. These gentlemen were met at our boundary line by our Deputy Minister and a special representation from this bureau who successfully presented the claims of Alberta for the benefit of their respective journals.

We are pleased to report that during the past year a large number of active boards of trade and publicity bureaus were organized throughout the province, many of which have exceeded our vote in expenditure, and are already planning for a still larger campaign next year. I think it is only justice to this bureau to state that many of these organizations are the indirect product of our own activity.

Prior to the organization of this branch, there were very few, if any, publicity bureaus in Alberta, while today there is hardly a town or village without a first class active organization.

I beg to acknowledge the assistance and co-operation of the various boards of trade and publicity organizations, and also the press of the province; all have united and rendered loyal and efficient service.

I have the honour to remain,

Your obedient servant,

CHAS. S. HOTCHKISS,

Chief Publicity Commissioner.

13. —REPORT OF THE SUPERINTENDENT OF DEMONSTRATION FARMS.

SIR,—Operations in connection with the demonstration farms of the province commenced early in May of this year. Seven farms were purchased, two of them being sections, two three-quarter sections and three half-sections. Most of the land was prairie sod so that the year has been occupied largely in breaking, fencing and erecting buildings. The following is a detailed account of the work done on the various farms:

MEDICINE HAT FARM.

This farm consists of 640 acres lying about two and a-half miles west of Medicine Hat. One hundred acres had been broken two years previously but had not been cropped. This land was brought into a good state of cultivation and the following crops were sown: Oats, flax, rye, alfalfa, potatoes, turnips, mangels, and corn. All these crops did well, the season being a favourable one for the district. The oats when harvested ran about 80 bushels to the acre. During the summer about 200 acres were broken and cultivated, 125 of which were sown to fall wheat. This crop went into the winter in splendid condition. The farm is fenced with a ten-strand 54 inch woven wire fence and split cedar posts.

Building operations commenced about the first week in May. The buildings being completed sometime early in July. The following is a list of the buildings erected with their dimensions:

Manager's house, 30 feet by 30 feet.
House for men, 18 feet by 26 feet.
Cow barn, 38 feet by 54 feet.
Horse barn, 42 feet by 44 feet.
Implement house, 16 feet by 48 feet.
Sheep pen, 24 feet by 30 feet.

The following is a list of the stock purchased:

16 Jersey females.
3 Berkshire sows.
8 head of working horses (geldings and mares).
1 team of colts (geldings).
2 foals.
1 driving horse.

The heavy horses are grade Clydesdales. The Jersey cows are doing exceptionally well. They are a large, strong, rugged type of Jersey and should be well adapted for this country.

CLARESHOLM FARM.

The Claresholm farm is located immediately south of the town and contains 320 acres. When purchased it was entirely prairie land. Breaking operations were commenced about the middle of May, 280 acres have been broken and cultivated, 100 of which has

been sown to fall wheat, the remainder being put in shape for spring crop. The work of building commenced about the first of July and was completed about the first of September.

The following is a list of the buildings erected with their dimensions:

Manager's house, 30 feet by 30 feet.
House for men, 20 feet by 26 feet.
Horse barn, 42 feet by 44 feet.
Cow barn, 36 feet by 72 feet.
Implement house, 18 feet by 48 feet.

Two teams of brood mares and one foal, also one driving horse were purchased early in the season; this heavy four-horse team did most of the cultivation work on the land.

OLDS FARM.

The Olds farm consists of 320 acres situated immediately east of the town. When purchased it was entirely covered with heavy brush. This brush was cleared away and about 130 acres broken and put in shape for spring crop. The farm was fenced with a ten-strand 54 inch woven wire fence. Building operations commenced about the 1st of August and were completed early in November. Practically the same buildings as outlined at Claresholm were erected and in addition a sheep pen 20 feet by 30 feet and hog pen 16 feet by 52 feet.

The following stock were purchased:

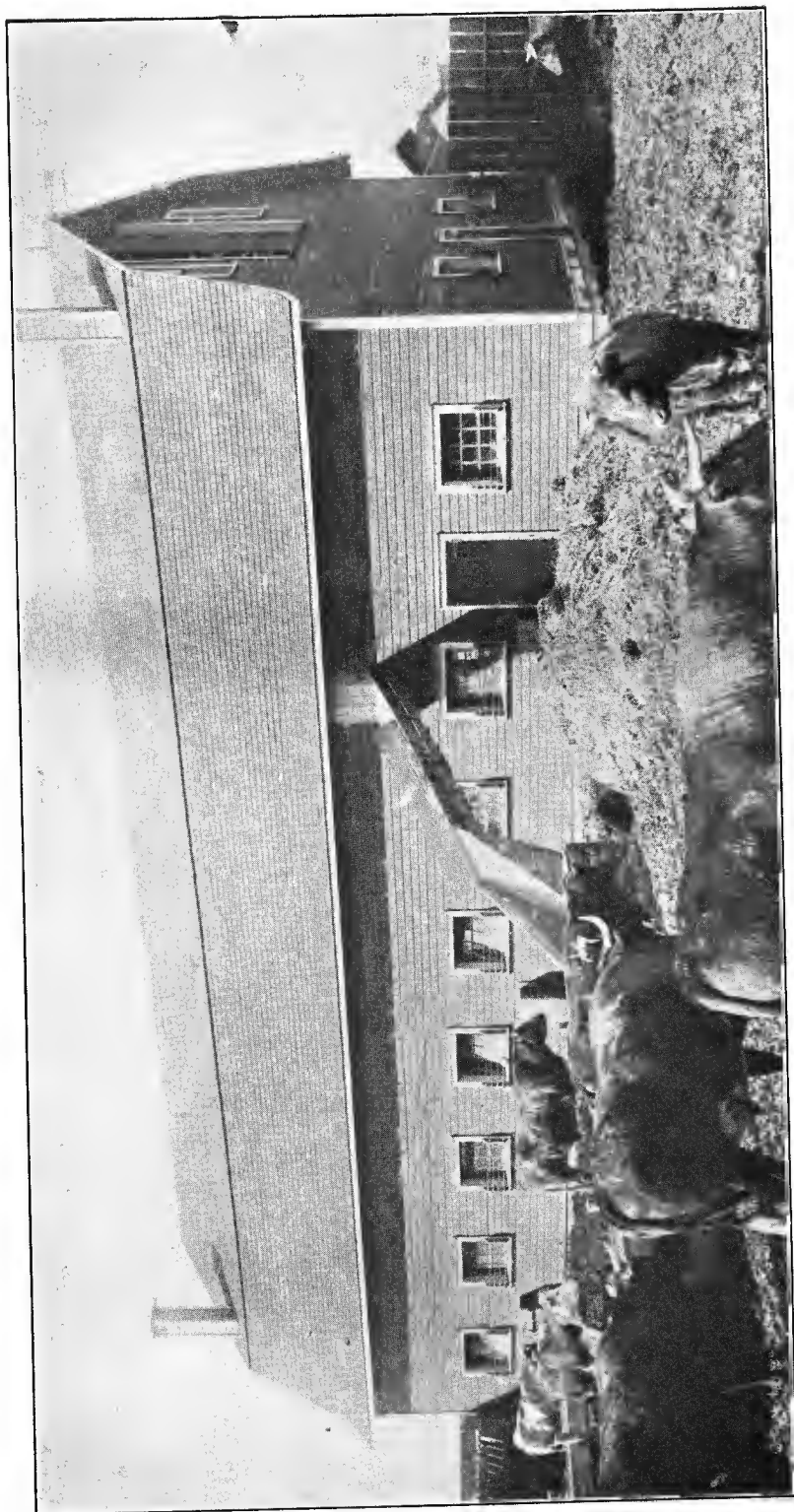
7 heavy horses (mares and geldings).
1 driver.
100 head of steers.

The steers were purchased with two objects in view: first, to produce revenue and secondly, to give steady employment to men who will be required for spring work and who would be difficult to replace were they discharged in the fall.

A three-quarter section crop was bought standing and harvested by the help on the farm. This crop is being fed to the steers at the present time. On the first of September Mr. Jas. Clements was appointed manager and assumed his duties on November 1st.

SEDGEWICK FARM.

At Sedgewick the Canadian Pacific Railway presented the department with a half section of land to be used as a demonstration farm. This land is located two miles from the station, and as it was thought that this location would prove inconvenient for carrying on educational work in the future, another half section was bought adjacent to the town. This land is located on the east side of the town between the farm presented by the Canadian Pacific Railway and the townsite. One quarter section on the east half of the farm was broken during the summer and brought under cultivation. Further than this no work has been done.



CATTLE BARN, DEMONSTRATION FARM, OLDS.

VERMILION FARM.

The farm at Vermilion consists of 320 acres and is located to the south-west of the town about half a mile from the station. In the neighbourhood of 200 acres of this farm is already under cultivation. At the time of purchase the crop on one of the quarter sections was reserved by the vendor. The crop on the other quarter section was partly sown when purchased. The department finished the seeding and harvested the crop which consisted of oats and wheat. Most of this crop was rather badly frozen so that no threshing was done. It is being fed in the sheaf to steers, seventy of which were purchased about the first of November.

Building operations were commenced about the first of October and were completed during the latter part of November. Practically the same set of buildings as outlined at Claresholm were erected.

Three mares of Percheron breeding have been secured, the mares to be used for breeding purposes and also to work on the farm.

Mr. H. W. Scott has been appointed manager.

No work of any importance has been done on the Stony Plain and Athabasca Landing farms.

Practically no revenue has been produced from any of the farms as yet on account of most of the land being prairie sod when purchased so that the first year necessarily has been one of preparation.

All of which is respectfully submitted.

H. A. CRAIG,
Superintendent of Demonstration Farms

14.—APPENDICES.

APPENDIX A.

ALBERTA HORSE BREEDERS' ASSOCIATION.

THIRTEENTH ANNUAL REPORT.

HON. DUNCAN MARSHALL,
Minister of Agriculture.

SIR,—I have the honour to submit herewith the thirteenth annual report of the Alberta Horse Breeders' Association for the year 1911.

The annual meeting was held in the new horse show building at Calgary, April 8, at 8 p.m., 1912.

MINUTES OF THE ANNUAL MEETING.

The president, Mr. Geo. Lane, in the chair.

The president addressed the meeting in connection with the horse industry generally and quoted the following interesting figures regarding the value of importations of horses coming into Western Canada.

Horses brought from Eastern Canada and the United States to Manitoba, Saskatchewan and Alberta (passing through Winnipeg).

YEAR.	NO. OF HORSES.	Total value at average of \$275.00 per head.
1909.	19,741	5,428,775
1910.	33,571	9,232,025
1911.	26,072	7,169,800

This does not include horses which come in from the United States duty free as settlers' effects.

The following purebreds were imported into Alberta, Manitoba and Saskatchewan:

ALBERTA		MANITOBA		SASKATCHEWAN	
Ponies.	22	Ponies.	5	Ponies.	10
Shires.	30	Shires.	5	Shires.	8
Suffolks.	18	Suffolks.	18		
		French Coach	2		
Hackneys.	3	Hackneys.	1	Hackneys.	4
Belgian.	79	Belgian.	18	Belgian.	18
German Coach	1	German Coach . .	1		
Thoroughbreds. . .	9	Thoroughbreds . .	7	Thoroughbreds. . .	1
Standardbreds. . .	22	Standardbreds. . .	33	Standardbreds . . .	18
Percherons.	129	Percherons.	157	Percherons.	81
Clydesdales	158	Clydesdales	121	Clydesdales	136
Hunters	4			Oldenburg.	1
				Saddle	2
	469		368		279

The president then called upon the secretary to read the annual report and financial statement.

Moved by Mr. Turner, seconded by Mr. I. G. Ruttle,—

That the annual report and financial statement be adopted as read. Carried.

The Hon. Duncan Marshall, Minister of Agriculture, was then asked to address the meeting. He congratulated the directors and members of the Horse Breeders' Association and the citizens of Calgary on the splendid new building which had been provided by the city for the accommodation of the spring shows. Such a building would be a valuable aid in making future shows a greater success than ever, and would undoubtedly reap for the citizens many times its value in connection with the various shows to be held in it. He congratulated the association on the success of the past shows, and stated that everything pointed to the show to be opened on the following day being the best in its history.

Before closing he mentioned that he believed the time had come when more stringent stallion legislation should be put in force in the province. He would be glad at all times to have any reasonable suggestions from the Alberta Horse Breeders' Association towards the encouragement and improvement of the horse breeding interests of the province.

Moved by Mr. J. C. Drewry, seconded by Mr. Fred Johnston,—

That Mr. George Lane and Mr. John A. Turner be a committee to act with similar committees of other live stock associations to endeavour to form better brand regulations. Carried.

Moved by Mr. Drewry, seconded by Mr. C. Riddock,—

That the directors be requested to give special encouragement in the prize list to horses bred in Alberta. Carried.

Moved by John A. Turner, seconded by Mr. I. G. Ruttle,—

That this meeting express to the citizens of Calgary, through His Worship the Mayor, a hearty vote of thanks for providing such an excellent building for the accommodation of the spring horse show. Carried.

ELECTION OF OFFICERS.

Moved by Mr. Ruttle, seconded by Mr. Von Strallendorf,—

That the election of officers be now proceeded with. Carried.

In nominating a president, Mr. Geo. Lane was nominated by Mr. Drewry, and Mr. Geo. Hoadley was nominated by Mr. de la Vergne.

Moved by Dr. Hargrave, seconded by Mr. Turner,—

That nominations close. Carried.

Moved by Col. Walker, seconded by Mr. O. E. Brown,—

That Mr. Gibson, Mr. Ruttle, Mr. Turner and Mr. Johnston be asked to act as scrutineers. Carried.

Mr. Hoadley expressed his desire to withdraw his name as he had acted as president one year, and he considered it would be better to have a president selected every two or three years from among the members who had not previously acted as president. His nominator, however, refused to have him withdraw. On ballot being taken Mr. Lane was declared elected.

Moved by Mr. Hoadley, seconded by Mr. Brown,—

That the balance of the officers of last year be re-elected with the exception that Mr. Schroeder be the director for Shires in the place of Mr. Hoadley. Carried.

The following is a full statement of the officers for the ensuing year:

OFFICERS.

President	George Lane, Pekisko.
First Vice-President.	C. J. Robert, Edmonton.
Second Vice-President	Dr. Hargrave, Medicine Hat.
Secretary....	E. L. Richardson, Calgary.

BREED DIRECTORS.

Clydesdales. . . .	John A. Turner, Calgary.
Shires....	F. Schroeder, High River.
Percherons. . .	W. B. Thorne, Aldersyde.
Thoroughbreds.	O. Critchley, Cochrane.
Standardbreds..	I. G. Ruttle, Calgary.
Coach Breds... .	G. E. Goddard, Cochrane.
Hackneys. . . .	Wm. Moodie, DeWinton.
Ponies.....	O. E. Brown, Calgary.
Suffolk Punch..	Geo. Jaques, Lamert n.
Belgians.... .	Baron Geo. Roels, L'Amoreux Creek.

Heavy Draught.....	E. D. Adams, Calgary.
Cartage.....	Fred Johnston, Calgary.
Roadsters.....	Geo. T. Haag, Calgary.
Carriage.....	Chas. Riddock, Calgary.
Agriculture.....	H. Bannister, Davisburg.
Delivery.....	W. J. Christie, Calgary.
Saddle.....	Count de Roaldes, Kew.

GENERAL DIRECTORS.

D. Clark, Gleichen.	F. N. Bedingfield, Pekisko.
Thos. McMillan, Okotoks.	Col. Walker, Calgary.
D. P. McDonald, Cochrane.	

The question of the appointment of judges was then discussed, and finally left in the hands of the directors to deal with.
The meeting then adjourned.

ANNUAL REPORT OF THE SECRETARY.

GENTLEMEN,—I beg to submit herewith the thirteenth annual report of the Alberta Horse Breeders' Association being for the year 1911-12.

SPRING HORSE SHOW.

During the past three or four years, the greatest progress has been shown in connection with the Provincial Spring Horse Show held at Calgary annually under the auspices of the Alberta and Dominion Departments of Agriculture and the Alberta Horse Breeders' Association. The increase in entries and attendance has been well in keeping with the progress made during the past few years in the development of Alberta. The following statement showing the number of entries, gate receipts and the amounts paid in prizes for the past four years is very encouraging to those who have co-operated in making this show a success.

	1908	1909	1910	1911
No. of entries....	90	615	925	960
Gate receipts....	No admission charged.	\$2,008.75	\$4,479.70	\$4,600.10
Prizes paid.....	444.57	2,708.86	3,734.09	4,648.42

Now that the show has grown to such proportions it can scarcely be expected that it will be possible to materially increase the number of entries. The greatest improvement which will be noted at the future shows will undoubtedly be more in the quality of the stock than in the numbers. Each year the exhibitors will take greater pains in training their horses and in bringing them out in the best possible condition; and the very high quality of the horses to be seen annually at the spring horse show will effectually demonstrate that the province of Alberta cannot be surpassed for horse raising, that the foundation stock of the various horse breeding establishments is of the best that can be secured in any part of the world, and that the horse breeders of Alberta are men of very considerable ability and skill.

The last show was officially opened on the evening of April 8 by His Honour Lieutenant Governor Bulyea. The auditorium was crowded to its capacity. The awards in the several classes were placed by the following judges:

Light harness classes—Dr. Roberts, Vancouver.
 Saddle horse classes and Thoroughbreds—H. C. Lawson, Regina.
 Clydesdales, Shires and heavy draft horses—James McKirdy,
 Napinka, Man.

Percherons, Belgians and Suffolk Punch horses—Prof. W. L. Carlyle, Moscow, Idaho.

Mr. W. S. Jacobs of Munson, Alta., acted as ring-master.

A feature of the horse show which deserves special mention was the splendid attendance of children on children's afternoon. The school teachers co-operated to make this day a success, and their efforts to interest the school children in horses were certainly appreciated.

Following is a complete list of the awards at the 1911 horse show:

I.—HEAVY HORSES.

Clydesdales. Stallions, five years old and over.

1st.	Ruby Baron.	.John A. Turner . . .	Calgary.
2nd.	Glassford Squire	.W. E. Butler . .	Ingersol, Ont.
3rd.	Baron Ailsa	.E. D. Adams . .	Calgary.

Stallion, four years old.

1st.	Allanfern .	.John A. Turner	Calgary.
2nd.	Scotland Standard	.A. L. Dollar	High River.
3rd.	Col. McQueen	James Clark	Crowfoot.
4th.	Bay Ronald	Duncan Clark .	Gleichen.

Stallion, three years old.

1st.	Dunoon. .	.Geo. O'Brien . .	Calgary.
2nd.	Argaty .	.Harold Banister	Davisburg.
3rd.	Meadow Bank	.John A. Turner	Calgary.
4th.	Sir Norton .	James Blark, Jr	Gleichen.

Stallion, two years old.

1st.	Slogarie	.Geo. O'Brien.	Calgary.
2nd.	Bouncing Billy	.Geo. O'Brien	Calgary.
3rd.	Scotland's Triumph	.A. L. Dollar	High River.
4th.	Prince Bountiful.	.John A. Turner . . .	Calgary.

Stallion, foaled in 1910.

1st.	Favorite	.John A. Turner . .	Calgary.
2nd.	Premier	W. S. Herron . .	Calgary.
3rd.	Barlae Jem . . .	Bryce Wright	De Winton.
4th.	Bob Shirley	J. W. Hayes	Calgary.

Stallion, two years and under, bred in Canada.

1st.	Prince Bountiful.	.John A. Turner . . .	Calgary.
2nd.	Baron of Moosomin.	.W. H. Croxford .	Airdrie.
3rd.	New Jersey . . . .	.Bryce Wright . .	De Winton.
4th.	Sonsie Laddie. .	.Wm. Moodie . .	De Winton.

Stallion over two years, bred in Canada.

1st.	Col. McQueen . . .	James Clark	Crowfoot.
2nd.	Crown and Feather	Wm. Moodie	De Winton.
3rd.	Pride of Lindsay	Geo. Spence	Cremona.
4th.	Diplomat	Wm. Moodie	De Winton.

DEPARTMENT OF AGRICULTURE

Mare, four years or over.

1st.	Irene.....	John A. Turner.....	Calgary.
2nd.	Eurydice.....	Thos. McMillan.....	Okotoks.
3rd.	Maggie Fleming..	Harold Banister..	Davisburg.
4th.	Lily Gartly...	A. J. B. Dewdney....	Calgary.

Mare, three years.

1st.	Poppy.	John A. Turner	Calgary.
2nd.	Georgina Murray.	Geo. O'Brien..	Calgary.
3rd.	Daisy Marshall.	W. S. Herron.	Calgary.

Filly, two years.

1st.	Pirene.	John A. Turner...	Calgary.
2nd.	College Queen.	Geo. O'Brien..	Calgary.
3rd.	Ruby McIntyre.	Bryce Wright	De Winton.

Filly foaled in 1910.

1st.	Maud McIntyre	Bryce Wright.	De Winton.
2nd.	Dolly D	J. W. Hayes.	Calgary.

Three, purebred or grade, any age or sex.

1st.	Barlae Jem, New Jersey and Favorite	Bryce Wright, De Winton.
2nd.	Col. McQueen, Lilly McQueen, Fancy McQueen.	James Clark, Crowfoot.

Best Canadian Bred Clydesdale, Stallion, any age.

Prince Bountiful.	John A. Turner.	Calgary.
Reserve, Col. McQueen	James Clark..	Crowfoot.

Best Canadian bred Clydesdale, female, any age.

Euridyce...	Thos. McMillan.	Okotoks.
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Champion Clydesdale Stallion, any age.

Ruby Baron.	John A. Turner...	Calgary.
Reserve, Dunnoon	Geo. O'Brien.	Calgary.

Champion Clydesdale, female, any age.

Irene...	John A. Turner.	Calgary.
Reserve, Poppy	John A. Turner	Calgary.

SHIRES.

Shire stallion, three years or over.

1st.	Windridge Boy.	W. W. Hunter..	Olds.
2nd.	Acle Harold..	F. Schroeder..	High River.
3rd.	Gilibrand Flag..	Geo. Hoadley.	Okotoks.

Shire stallion, two years.

1st.	Intake Coronation.	F. Schroeder	High River.
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Mare, two years or over.

1st.	Fern.	W. W. Hunter.	Olds.
2nd.	Newton Solney Ruth.	Allan Gant...	Sedgewick.

Best Shire stallion, any age.

Windridge Pride...	W. W. Hunter....	Olds.
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PERCHERONS.

Stallion, five years or over.

1st.	Echad.....	Robt. Hamilton & Sons, Simcoe, Ont.
2nd.	Gracieux.....	C. R. de la Vergne. .Glenbow.

Stallion, four years.

1st.	Halifax.....	Geo. Lane & Gordon, Ironsides & Fares Co. .Pekisko.
2nd.	Habitus.....	John Drewry .Cowley.
3rd.	Henner.....	John Drewry.....Cowley.
4th.	Halbian.....	Geo. Lane & Gordon, Ironsides & Fares Co. .Pekisko.

Stallion, three years.

1st.	Illico.....	W. B. Thorne.....Aldersyde.
2nd.	Ilmen.....	Geo. Lane & Gordon, Ironsides & Fares Co. .Pekisko.
3rd.	Institute.....	Geo. Lane.....Bassano.
4th.	Ilus.....	Robt. Hamilton & Sons, Simcoe, Ont.
5th.	Imprimer.....	W. W. HunterOlds.

Stallion, two years.

1st.	Fenelon.....	Y. Drake and W. E. & R. C. Upper....Elbow River.
2nd.	Brilliant.....	Stooke & Amery..Crossfield.

Mare, three years or over.

1st.	Bichette.....	Geo. Lane & Gordon, Ironsides & Fares Co. .Pekisko.
2nd.	Giges.....	J. C. Drewry .Cowley.
3rd.	Amanda.....	J. C. Drewry.....Cowley.
4th.	Giberne.....	C. R. de la Vergne .Glenbow.
5th.	Illyre.....	W. W. Hunter.Olds.

Filly, two years.

1st.	Columbia.....	Geo. Lane & Gordon, Ironsides & Fares Co. .Pekisko.
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Filly Foaled in 1910.

1st.	Brillia.....	Stooke & Amery.....Crossfield.
2nd.	Lily of the Valley . . .	Y. Drake and W. E. & R. C. Upper.....Elbow River.

Best Percheron Stallion, any age.

Halifax.....	Geo. Lane & Gordon, Ironsides & Fares Co. .Pekisko.
Reserve, Illico.....	W. B. Thorne .Aldersyde.

Best Percheron female, any age.

Bichette.....	Geo. Lane & Gordon, Ironsides & Fares Co. .Pekisko.
Reserve, Columbia.....	Geo. Lane & Gordon, Ironsides & Fares Co. .Pekisko.

Best Canadian bred Percheron mare, any age.

Columbia.....	Geo. Lane & Gordon, Ironsides & Fares Co. .Pekisko.
Reserve, Alberta.....	Geo. Lane & Gordon, Ironsides & Fares Co. .Pekisko.

DEPARTMENT OF AGRICULTURE

Best Canadian bred Percheron filly, one year old.

Brillia..... .Stooke & Amery..... .Crossfield.

BELGIANS.

Stallion, three years or over.

1st. Gamin de Questenne .R. Pirmez.... .Pirmez Creek.
 2nd. Heron de Melin. .W. W. Hunter . .Olds.
 3rd. Pius..... .Jas. Faris. .Trenville.

Mare, three years or over.

1st. Bobine de Houdzocht..W. W. Hunter . .Olds.
 2nd. Cora de Croix.. .W. W. Hunter. . .Olds.
 3rd. Mathilde..... .R. Pirmez.. .Pirmez Creek.

Best female, any age.

Bobine de Houdzocht. . . .W. W. Hunter.... .Olds.

SUFFOLK PUNCH.

Stallion, four years or over.

1st. Morston Gay Monarch. .Archie Jaques. . .Lamerton.
 2nd. Soapsuds..... .Spencer Pearse . .East End, Sask.
 3rd. Rendalshem Matchem .Archie Jaques. . .Lamerton.
 4th. Rendalshem Snow King. H. W. Savory. .Lethbridge.

Stallion, three years.

1st. Ashmoor Rufus .Geo. Hoadley. . .Okotoks.
 2nd. Morton Rambler .Spencer Pearse . .East End, Sask.
 3rd. Haskerton Snipe. .Archie Jaques. . .Lamerton.
 4th. Rendalshem Beggar .Archie Jaques .Lamerton.

Best Stallion, any age.

Ashmoor Rufus. .Geo. Hoadley. . .Okotoks.

HEAVY GRADE FOALS.

Grade foals of either sex, foaled in 1910.

1st. Puss .R. Young .Springbank.
 2nd. . .Harold Banister. .Davisburg.

DRAUGHT HORSES.

Four-horse team, Percheron, Belgian or Suffolk.

1st. Geo. Lane & Gordon, Ironsides & Fares Co..... .Pekisko.

Four-horse team, Clydesdales and Shires.

1st. James Clark . . .Crowfoot.
 2nd. Pacific Cartage Co . . .Calgary.
 3rd. Pacific Cartage Co . . .Calgary.

Team in harness only, each horse to weigh 1,500 pounds or over.

1st. Fred and Gartly .J. Clark . .Crowfoot.
 2nd. Proud Beauty and Lily . . .A. J. B. Dewdney . .Calgary.
 3rd. Giberne and Gloire . .C. R. de la Vergne .Glenbow.
 4th. Bog Davie Queen and Lily MacQueen.. .John Clark. .Gleichen.

Team in harness only, each horse to weigh under 1,500 pounds but not less than 1,300 pounds.

1st.	Dinah McClure and Fancy McQueen.....	James Clark.....	Crowfoot.
2nd.	Duke and Prince.....	Thos. Watt.....	Calgary.

Draught mare or gelding, 1,500 pounds or over.

1st.	Maggie Fleming.....	Harold Banister.....	Davisburg.
2nd.	Fred.....	James Clark.....	Crowfoot.
3rd.	Proud Beauty.....	A. J. B. Dewdney.....	Calgary.

Draught mare or gelding.

1st.	Fancy McQueen.....	James Clark.....	Crowfoot.
2nd.	Dinah McClure.....	James Clark.....	Crowfoot.

Pair of grade horses, mares or geldings.

1st.	Fred and Gartly.....	James Clark.....	Crowfoot.
2nd.	Prince and Barney.....	Malcolm McCannel.....	Carstairs.

Heavy draught grade team to be shown in harness only.

1st.	Fred and Gartly.....	James Clark.....	Crowfoot.
2nd.	Pete and Mate.....	Johnston Cartage Co.....	Calgary.
3rd.	Prince and Barney.....	M. McCannel.....	Carstairs.

Heavy draught grade mare or gelding.

1st.	Fred.....	James Clark.....	Crowfoot.
2nd.	Gartly.....	James Clark.....	Crowfoot.
3rd.	Pete.....	Johnston Storage & Cartage Co.....	Calgary.

II.—LIGHT HORSES.

THOROUGHBREDS (*Registered*).

Stallion four years or over.

1st.	Sinbad.....	Geo. M. Gray.....	Gleichen.
2nd.	Gay Boy.....	David A. Campbell.....	Calgary.
3rd.	Chanter.....	W. H. Cochrane.....	Millarville.
4th.	Mellvain.....	C. Meers.....	Calgary.

Stallion, three years old.

1st.	King Copper.....	Walter Sporle, Jr.....	Edmonton.
2nd.	Tuscan.....	W. A. McKenzie.....	Calgary.
3rd.	Ensign.....	W. A. McKenzie.....	Calgary.

Stallion, two years old.

1st.	Buri.....	G. K. Allen.....	Edmonton.
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Mare, three years or over.

1st.	Barn.....	D. A. Campbell.....	Calgary.
2nd.	Miss Alvescot.....	Reed & Mayer.....	Calgary.
3rd.	Nellie Racine.....	W. J. Alford.....	Calgary.
4th.	Josie S.....	W. J. Alford.....	Calgary.

Mare, two years.

1st.	Winnie Wells.....	G. K. Allen.....	Edmonton.
2nd.	Lomont.....	J. R. Smith.....	Carbon.

Filly foaled in 1910.

1st. W. A. McKenzie.....Calgary.

*Canadian Thoroughbred Horse Special for Thoroughbred Stallions
three years old and upwards, suitable for getting saddle
horses and hunters.*

Sinbad. G. M. Gray. Gleichen.

Best stallion, any age.

Sinbad. G. M. Gray. Gleichen.

Best female, any age.

Barm.. . . . D. A. Campbell. Calgary.
Reserve, Winnie Wells. . . . G. K. Allen.... Edmonton.

*Three pure bred or grade, any age or sex, bred in Alberta, progeny
of one registered sire.*

Tuscallette, Tuscan and Ensign . W. A. McKenzie.....Calgary.

STANDARD BREDS.

Pacing stallion, three years old and over.

1st.	I. G. Ruttle....	Geo. T. Haag. . . .	Calgary.
2nd.	M. S. McCarthy.	Geo. T. Haag....	Calgary.
3rd.	Halmont. . . .	W. B. Edwards....	Crossfield.

Trotting stallion, three years old and over.

1st.	W.H.S.	Geo. T. Haag.. . .	Calgary.
2nd.	General Bryson..	J. E. Shoultz.	Pincher Creek.
3rd.	Moniemusk. . . .	G. C. McMurray.	Calgary.
4th.	Rampart....	Dr. L. Saunders.	Calgary.

Stallion, two years old.

1st.	Prince Pong..	J. R. Sutherland.	Calgary.
2nd.	Alberta Pride.	Thos. Collett.	Raymond.
3rd.	Black Colt...	A. N. Dafeo.	Calgary.

Stallion, foaled in 1910.

1st. Sir Wilfred. J. R. Sutherland Calgary.

Mare, three years or over.

1st.	Halberta. . . .	McKay & Smith..	Calgary.
2nd.	Bonnie..	John Louden.	Calgary.
3rd.	Winona Wiggins	I. G. Ruttle.	Calgary.
4th.	Lamona.	I. G. Ruttle. . .	Calgary.

Mare, two years.

1st.	Myrtle Page.	J. Page..	Calgary.
2nd.	Kippitaki..	A. G. McDonald.	Calgary.

Filly foaled in 1910.

1st.	Mainsheaf. . .	McKay & Smith.	Calgary.
2nd.	Alba McGregor..	McKay & Smith, .	Calgary.

Best female, any age.

Myrtle Page.	J. Page. . . .	Calgary.
Reserve, Halberta.	A. M. McKay..	Calgary.

Standard bred special, three pure bred or grade, bred in Alberta, the progeny of one sire, registered.

- 1st. Three progeny of Ping
Pong. G. T. Haag. Calgary.
2nd. Coneyberry, Happy,
Myrtle Page. A. G. McDonald. Calgary.

HACKNEYS.

Stallion, four years or over.

- 1st. Le Roi. John Weir. Carbon.
2nd. King of the West. A. A. Robinson. Saskatoon.
3rd. Ockwold President. Thos. Collett. Raymond.
4th. Scoreby Gentleman. G. S. Rosamond. Innsifail.

Stallion, any age.

- 1st. Woodland's Sensation. J. J. Richards. Red Deer.
2nd. Le Roi. John Weir. Carbon.
3rd. King of the West. A. A. Robinson. Saskatoon.

Stallion, three years old.

- 1st. Starlight. Wm. Moodie. De Winton.

Mare, two years or over.

- 1st. Withan's Lady Tuck. F. C. Lowes & Co. Calgary.
2nd. Goodmanham. C. J. Robert. Edmonton.
3rd. Warwick Lady. W. and T. Stewart. Priddis.

Special donated by the Hackney Horse Society of Great Britain for best stallion, any age.

- Woodland's Sensation. J. J. Richards. Red Deer.

COACH BREEDS.

Stallion, three years or over.

- 1st. Fra Diavolo. G. E. Goddard. Cochrane.
2nd. Darius. Geo. Hoadley. Okotoks.
3rd. Bolivar. G. E. Goddard. Cochrane.

Stallion, any age.

- 1st. Fra Diavolo. G. E. Goddard. Cochrane.
2nd. Bodo. J. B. Shearer. Edmonton.

Best stallion, any age.

- Fra Diavolo. G. E. Goddard. Cochrane.

Coach breed special, three purebred or grade, any age or sex, bred in Alberta, the progeny of one registered sire.

- 1st. Dainty, Daphne, Eclipse. G. E. Goddard. Cochrane.

LIGHT GRADE FOALS.

Light grade foal of either sex foaled in 1910, sired by a registered light stallion.

- 1st. Foal. Robert Lake. Calgary.
2nd. Comet. W. and T. Stewart. Priddis.

DEPARTMENT OF AGRICULTURE

ROADSTERS.

Mare or gelding over 15 hands.

1st.	Bonnie.....	John Louden....	Calgary.
2nd.	Winona Wiggins..	I. G. Ruttle.....	Calgary.
3rd.	King David..	Stirling & Parker..	Calgary.

Mare or gelding, 15 hands or under.

1st.	Dime	C. Riddock..	Calgary.
2nd.	Neda..	E. Sisley.....	Calgary.
3rd.	Maud...	W. J. Alford..	Calgary.
4th.	Rowdy..	F. Whitaker..	Calgary.

Pair of trotting mares or geldings, three years old and over.

1st.	King David and Prince.	Stirling & Parker.	Calgary.
2nd.	Winona Wiggins and Mate.....	I. G. Ruttle.	Calgary.
3rd.	St. Patrick's Knight and Dr. J. T. Cose.....	J. Faris..	Trenville.

Single trotting mare or gelding, three years old and over, 15.1 hands or under.

1st.	Winona Wiggins.	I. G. Ruttle.	Calgary.
2nd.	Dime..	C. Riddock.	Calgary.
3rd.	Neda...	E. Sisley.	Calgary.
4th.	St. Patrick's Knight....	J. Faris.	Trenville.

Single trotting mare or gelding, three years old and over 15.1 hands.

1st.	King David.....	Stirling & Parker. .	Calgary.
2nd.	Lady Lightfoot..	W. Stuart & Co.	Calgary.
3rd.	Barney.....	J. Louden.	Calgary.
4th.	Brampton Boy.. .	F. C. Lowes & Co....	Calgary.

Pacing mares or geldings, three years old and over.

1st.	Bess M. and Admiral Togo.....	J. E. Moffatt..	Claresholm.
2nd.	Lomona and Kootenai.	I. G. Ruttle. .	Calgary.

Single pacing mare or gelding, three years old and over.

1st.	Lomona...	I. G. Ruttle .	Calgary.
2nd.	Admiral Togo.	J. E. Moffat	Claresholm.
3rd.	Honest Joe.	C. Riddock..	Calgary.

Team of drivers, shown to an appropriate vehicle.

1st.	Admiral Togo and Bess M.....	J. Robertson and Moffatt, Claresholm.	
2nd.	Alberta and Vedor...	James Faris.	Trenville.
3rd.	St. Patrick and Dr. J. T. Cox.....	J. Faris.	Trenville.

CARRIAGE, COACH AND HACKNEY HORSES.

Pair of mares or geldings.

1st.	Victor and Victoria. . .	F. C. Lowes & Co....	Calgary.
2nd.	Lady Proaig and Lady Warwick.....	W. and T. Stewart. . .	Priddis.
3rd.	Peacock and Harry....	I. G. Ruttle	Calgary.
4th.	Gay Boy and Billy Mac	Stirling & Parker...	Calgary.

Mare or gelding.

1st.	Lady Tuck.....	F. C. Lowes & Co..	Calgary.
2nd.	Goodmanham May...	C. J. Robert.....	Edmonton.
3rd.	Victoria	F. C. Lowes & Co....	Calgary.
4th.	Warwick Lady..	W. and T. Stewart....	Priddis.

Mare or gelding over 15.1 hands.

1st.	Victoria.	F. C. Lowes & Co..	Calgary.
2nd.	Bill. . . .	E. D. Adams.....	Calgary.
3rd.	Warwick Lady..	W. and T. Stewart...	Priddis.

Mare or gelding 15.1 hands or under.

1st.	Going Some..	F. C. Lowes & Co..	Calgary.
2nd.	Barm.....	D. A. Campbell....	Calgary.
3rd.	Lady Proaig.. . . .	W. and T. Stewart....	Priddis.

High Stepper, mare or gelding.

1st.	Going Some..	F. C. Lowes & Co..	Calgary.
2nd.	Lady Tuck.....	F. C. Lowes & Co....	Calgary.
3rd.	Warwick Lady	W. and T. Stewart..	Priddis.
4th.	Game Cock...	C. J. Robert.. . .	Edmonton.

Pair of high steppers, mares or geldings, 14.2 hands over.

1st.	Lady Tuck and Crispian	F. C. Lowes & Co..	Calgary.
2nd.	Victor and Victoria..	F. C. Lowes & Co..	Calgary.

Team of Drivers.

1st.	Lady Proaig and Lady Warwick... . . .	W. and T. Stewart. . .	Priddis.
2nd.	Ajax and Golden Rod..	G. E. Goddard... . .	Cochrane.

III.—LIGHT HARNESS CLASSES.

Pony, 14.2 hands and under.

1st.	Torrie...	E. H. Thomas..	Lloydminster.
2nd.	Jacobite..	M. J. Carr .	Calgary.

Pair of ponies, 14.2 hands under.

1st.	Sam and Satan.	W. J. Nolan. .	Calgary.
2nd.	Kit and Gipsey..	C. Kinniburg.	Calgary.
3rd.	Modesty and Jacobite..	M. J. Carr..	Calgary.

Cob, 14.2 and under 15 hands, in harness.

1st.	Going Some..	F. C. Lowes & Co..	Calgary.
2nd.	Billy...	A. J. B. Dewdney..	Calgary.
3rd.	Modesty...	M. J. Carr.	Calgary.

TANDEM, FOUR-IN-HAND AND COMBINATION CLASSES.

Tandems, light mares and geldings, 14.2 hands and over.

1st.	Victor and Victoria...	F. C. Lowes & Co...	Calgary
2nd.	Lady Proaig and War- wick Lady. . . .	W. and T. Stewart....	Priddis.

Four-in-hand, light, 15 hands and over.

1st.	Peacock, Harry, Darkey and Jim. . . .	I. G. Ruttle.. . .	Calgary.
2nd.	.. . .	Stirling & Parker..	Calgary.

Combination horse, mare or gelding, 15.1 hands and under.

1st.	Barm..	.D. A. Campbell.....	.Calgary.
2nd.	So Am I	.F. C. Lowes & Co.	.Calgary.
3rd.	Red Fox	.Tom Ward..	.Calgary.
4th.	Rowdy..	.F. Whitaker .	.Calgary.

Combination horse, mare or gelding, over 15.1 hands

1st.	Witchcraft	Geo. A. Hull..	.Calgary.
2nd.	Jim..	W. and T. Stewart	Priddis.
3rd.	Donald.	M. J. Carr .	.Calgary.

SPECIAL FOR BOYS AND GIRLS.

Saddle pony, 14.2 hands or under, ridden by girl.

1st.	Flirt.	R. Von Strallendorf	..Okotoks.
2nd.	Jacky.	Miss E. M. Millar	.Millarville.
3rd.	Jacobite	M. J. Carr	.Calgary.
4th.	Manniken	M. J. Carr	.Calgary.

Saddle pony, 14.2 hands or under, ridden by boy.

1st.	Jacky.	Miss E. M. Millar	Millarville.
2nd.	Ginger	Geo. Short	Calgary.
3rd.	Fan ..	W. and T. Stewart	Priddis.
4th.	Jacobite	M. J. Carr	Calgary.

Pony, 14.2 hands or under driven by boy or girl.

1st.	Jacky.	Miss E. M. Millar	Millarville.
2nd.	Jacobite	M. J. Carr .	Calgary.
3rd.	Dobbin	Geo Hoadley. . .	Okotoks.

Combination pony, 14 hands and under.

1st.	Jacky.	Miss E. M. Millar	Millarville.
2nd.	Dobbin	Geo. Hoadley	.Okotoks.
3rd.	Nettie..	Ben Tesky....	Calgary.

Shetland Pony.

1st.	Tommy.	W. C. Hoadley	Okotoks.
2nd.	Londillon.	Stanley Slater	.Calgary.

IV.—SADDLE CLASSES.

Saddle horse, over 14.2 hands.

1st.	Royal George	W. A. McKenzie	Calgary.
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Mare or gelding under English or stock saddle, over 15.1 hands.

1st.	Katy Did	F. C. Lowes & Co	.Calgary.
2nd.	Journalist	W. J. Watson	Calgary.
3rd.	Cottontail	Mrs. Millar	.Millarville.
4th.	Sailor.	Geo. Roels	Calgary

Mare or gelding under English or stock saddle, 15.2 hands or under but over 14.2.

1st.	Lady Princess.	..R. Von Strallendorf	.Okotoks
2nd.	So Am I. .	..F. C. Lowes & Co	.Calgary.
3rd.	Lady Beaver Dam	.R. Von Strallendorf	.Okotoks.
4th.	Caesar ..	.E. Doughty.	.Calgary.

Cob, 14.2 hands and under 15 hands, shown under English saddle.

1st.	So Am I....	F. C. Lowes & Co..	Calgary.
2nd.	Light Brigade..	Murray Hendrie..	High River.
3rd.	Lady Beaver Dam	R. Von Strallendorf	Okotoks.
4th.	Billy..	A. J. B. Dewdney..	Calgary.

Ladies' Saddle Horse, mare or gelding, 15.1 hands and under.

1st.	Lady Beaverdam	R. Von Strallendorf	Okotoks.
2nd.	Lou..	E. L. McBride....	Cochrane.
3rd.	Lady Princess	R. Von Strallendorf	Okotoks.
4th.	Red Wing....	A. G. D. Kitson.	Calgary.

Park hack under 16 hands, shown under saddle.

1st.	Katy Did....	F. C. Lowes & Co..	Calgary.
2nd.	Lady Beaverdam	R. Von Strallendorf.	Okotoks.
3rd.	Blackfoot.....	Count de Roaldes....	

Ladies' saddle horse, mare or gelding, over 15.1 hands.

1st.	Journalist.	W. J. Watson. . .	Calgary.
2nd.	Katy Did.	F. C. Lowes & Co .	Calgary.
3rd.	Cottontail.	Mrs. Millar.....	Millarville.
4th.	Kelowna..	Miss Hutchinson.	Calgary.

Military Remount.

1st.	Maria. . .	R. Young.	Springbank.
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Light weight polo pony, or pony suitable for polo.

1st.	First Principal.	Murray Hendrie. .	High River.
2nd.	Beauty...	K. J. Snowden.....	Pekisko.
3rd.	Flirt.	R. Von Strallendorf.	Okotoks.
4th.	Lady Princess...	R. Von Strallendorf....	Okotoks.

Heavy weight polo pony, or pony suitable for polo.

1st.	Carbine.	W. A. McKenzie....	Calgary.
2nd.	Robin..	A. J. B. Dewdney.	Calgary.
3rd.	Modesty	M. J. Carr.....	Calgary.
4th.	Lou..	E. L. McBride. . .	Cochrane.

Grand Champion saddle horse.

Katy Did	F. C. Lowes & Co.	Calgary.
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V.—HUNTERS AND JUMPERS

Hunter, mare or gelding.

1st.	Journalist	W. J. Watson.	Calgary.
2nd.	Please..	Geo. Roels.. . .	Calgary.
3rd.	Flirt .	R. Von Strallendorf.	Okotoks
4th.	Sailor..	Geo. Roels.....	Calgary.
5th.	Kelowna..	Miss Hutchinson.. .	Calgary.

Hunter, mare or gelding, 14.2 hands or under.

1st.	White Eagle.	R. Von Strallendorf .	Okotoks.
2nd.	Flirt...	R. Von Strallendorf....	Okotoks.
3rd.	Modesty.	M. J. Carr.....	Calgary.
4th.	Comet....	Angus McPherson.....	Cochrane.

Hunter, mare or gelding, over 14.2 hands.

1st.	Journalist.	W. J. Watson.	Calgary.
2nd.	Please...	Geo. Roels.. . .	Calgary.
3rd.	Paddy.....	F. C. Lowes & Co....	Calgary.
4th.	Lady Beaverdam.	R. Von Strallendorf..	Okotoks.

DEPARTMENT OF AGRICULTURE

High Jump.

1st.	Smokey and Frolic	D. P. McDonald and R. Von Strallendorf	Okotoks.
2nd.	Paddy	F. C. Lowes	Calgary.
3rd.	Flirt	R. Von Strallendorf	Okotoks.
4th.	Zino	Mrs. A. McPherson	Cochrane.

Okotoks Hunter Trophy.

1st.	Please	Geo. Roels	Calgary.
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Challenge Cup offered by Count de Roaldes, for best performance over four timber jumps.

1st.	Frolic	R. Von Strallendorf	Okotoks.
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Champion Jumper.

Paddy	F. C. Lowes	Calgary.
Reserve, Flirt	R. Von Strallendorf	Okotoks.

Light weight hunter, mare or gelding, four years or over, 15 hands or over.

1st.	Journalist	W. J. Watson	Calgary.
2nd.	Lady Beaverdam	R. Von Strallendorf	Okotoks.
3rd.	Frolic	R. Von Strallendorf	Okotoks.

Heavy weight hunter, mare or gelding, four years or over, 15 hands or over.

1st.	Please	Geo. Roels	Calgary.
2nd.	Sailor	Geo. Roels	Calgary.
3rd.	Cottontail	Mrs. Millar	Millarville.

Champion Hunter.

Journalist	W. J. Watson	Calgary.
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VI.—GENERAL CITY DELIVERIES AND DRAY CLASSES.

Mare or gelding shown to express or delivery rig.

1st.	P. Burns & Co	Calgary.
2nd.	Ontario Laundry	Calgary.
3rd.	Carlyle Dairy Co	Calgary.

Mare or gelding shown to single lorrie or cart.

1st.	W. Stewart	Calgary.
2nd.	Calgary Brewing & Malting Co	Calgary.
3rd.	W. Stewart	Calgary.

Heavy team as used by wholesalers, etc.

1st.	W. Stuart & Co	Calgary.
2nd.	The Arctic Ice Co	Calgary.
3rd.	P. Burns & Co	Calgary.
4th.	Winnipeg Oil Co	Calgary.

Light team as used by wholesalers, etc.

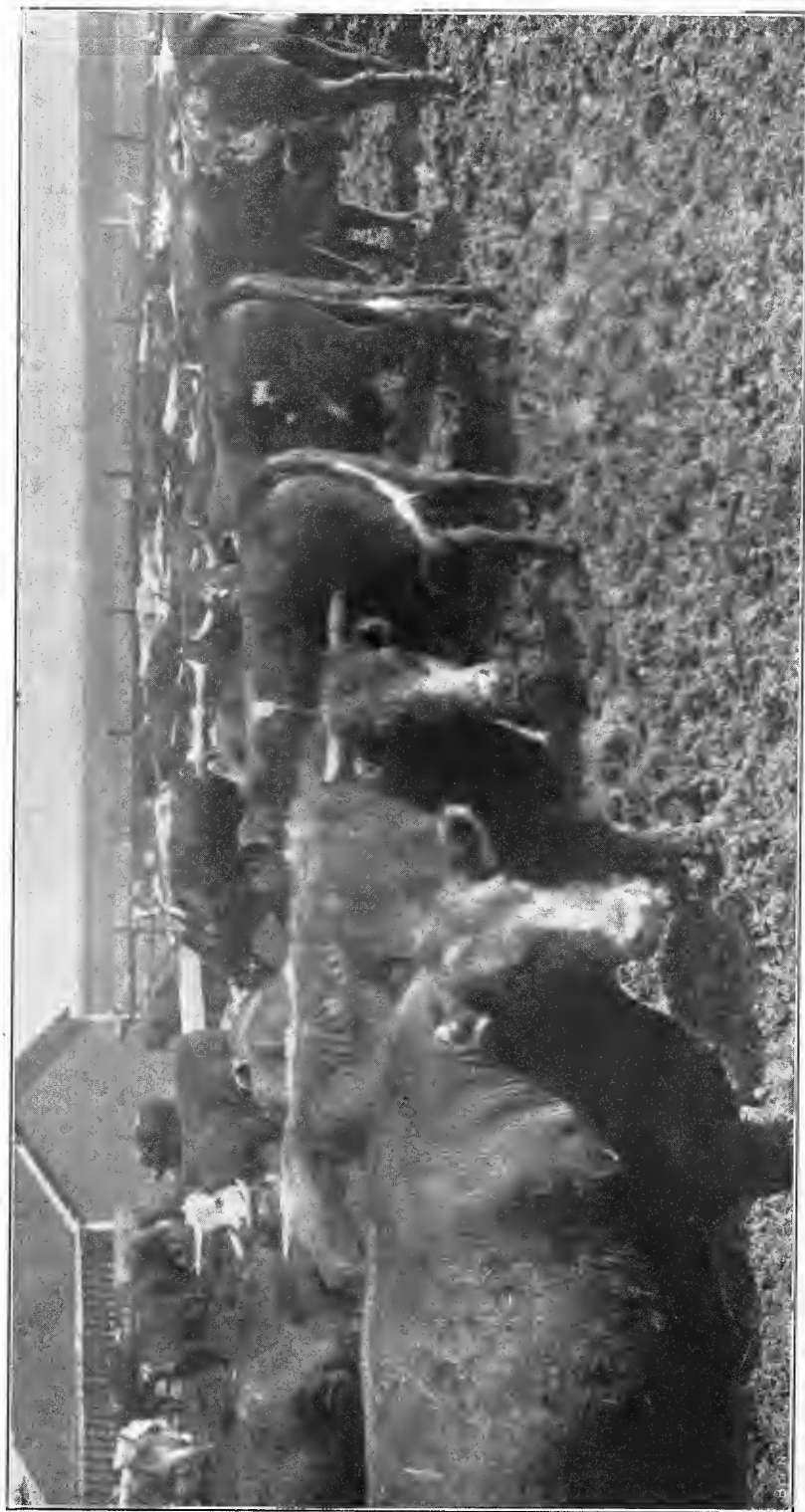
1st, 2nd and 3rd—	Ontario Laundry	Calgary.
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Heavy team as used by cartage company.

1st.	Pacific Cartage Co	Calgary.
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Single delivery, mare or gelding, 16 hands or over.

1st.	Geo. Short	Calgary.
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STEERS ON WINTER FEED AT DEMONSTRATION FARM, OLDS.

Grand champion cartage team.

W. Stuart & Co. Calgary.

LIVERY RIGS AS LET FOR HIRE.

Livery Exhibit.

1st. I. G. Ruttle Calgary.
2nd. Stirling & Parker Calgary.

Pair of mares or geldings.

1st. Darkey and Jim I. G. Ruttle Calgary.
2nd. Gay Boy and Billie Stirling & Parker Calgary.

Mare or gelding, 14 2 hands or over, shown under saddle.

1st. Hector A. G. Alford Calgary.
2nd. Peacock I. G. Ruttle Calgary.

FINANCIAL STATEMENT.

I have pleasure in attaching hereto copy of the financial statement of the Horse Breeders' Association for the year 1911. The receipts and disbursements have been duly audited by your auditor. It is very pleasing to be able to report that although an increase of \$914.33 was paid in prizes over the amount paid at the 1910 show, the balance on hand has been increased from \$536.36 to \$809.20 during the year. The amount offered for prizes in the various classes is still considerably smaller than it should be, and an increase should be made as the funds of the association will permit. Following this policy your directors have added approximately \$1,800 to the prize list for 1912 over the amount offered in 1911. I wish on behalf of the association to thank the Hon. Duncan Marshall, Minister of Agriculture, for increasing the annual grant to the Alberta Horse Breeders' Association from \$1,200 to \$1,500, which increase will greatly assist the directors in carrying on the work of the association. I also wish to thank the Dominion Department of Agriculture for their assistance during the year.

FINANCIAL STATEMENT OF THE ALBERTA HORSE BREEDERS' ASSOCIATION FOR THE YEAR ENDING 31ST DECEMBER, 1911.

RECEIPTS.

Membership fees		\$205.00
Gate receipts, horse show		4,600 10
Grant by Alberta Department of Agriculture	\$1,200 00	
Grant by Calgary City Council	500 00	
Grant by Dominion Department of Agriculture	216 67	
Cash donations	720 00	
Donations of medals, trophies, etc., value	785 00	3,421 67
Entry fees		1,131.00
Advertising and catalogue privilege		240.00
Collected for Miss Walsh's trophy		95.00
Sundries		60.05
Total receipts 1911		9,752.82
Balance on hand December 31st, 1910		536 36
		<hr/> \$10,287 18

DISBURSEMENTS.

Paid in prizes	\$4,648 42
Grounds expense, rent of rink and extra help.	2,765 26
Postage, stationery and office expense.	914 20
Secretary's salary	500 00
Printing and advertising	584 60
Sundries	65 50
Total expenditure 1911	9,477 98
Balance on hand December 31st, 1911	809 20
	<hr/> \$10,287 18

Examined and found correct, 15th February, 1912.

(Sgd.) F. R. EXHAM, Auditor.

NEW SPECIAL LIVE STOCK CONTRACT.

The freight departments of the railroads operating in Canada prepared a special live stock contract for use in shipping live stock by freight throughout Canada. The proposed new contract contained many clauses which were considered very unfair by the live stock shippers. The Alberta Horse Breeders' Association in co-operation with Live Stock Commissioner Stevens of Alberta, the Provincial Horse Breeders' Associations throughout the Dominion of Canada, and the Canadian Manufacturers' Association, took up the matter in order that any new regulations which were put in force would be reasonable. A conference was arranged for in Toronto, and the Alberta Horse Breeders' Association was represented by the President, Mr. George Lane, Mr. W. F. Stevens, Live Stock Commissioner for Alberta, and Mr. Chas. Hotchkiss of the Department of Agriculture, Edmonton. The representatives of the various associations held several meetings in Toronto in December, 1911, and also had interviews with the railway representatives. A committee was appointed to complete the negotiations, and to take the matter before the Railway Commissioners if a reasonable contract was not agreed to by the railway officials. Negotiations are not yet completed, and it is probable that before the contract is passed by the Railway Commission evidence will be taken throughout Canada by the commission in order that an agreement may be made which will be equitable between the shippers and the Railway Companies.

IMPORTATION OF INFERIOR HORSES FROM THE UNITED STATES.

The importation of inferior horses from the United States to Alberta during the month of February was brought to the attention of the association. A special meeting of the directors was called at which the undersigned submitted several photographs of the horses. It was the opinion of those who saw the horses that they were not all broken, and should not therefore have been allowed to pass the customs inspection. A number of the horses referred to were such as are usually found on Indian reserves, the importation of which is a serious detriment to the horse breeding interests of the province. The following resolution was passed unanimously by the directors:

That the Alberta Horse Breeders' Association respectfully request the Minister of Customs and the Veterinary Director General to thoroughly investigate the shipments of horses imported to Calgary via Twin Lakes and Cardston, and offered for sale at the Calgary stock yards on February 29th, so as to satisfy themselves

that the shipments in question were imported in strict accordance with the law governing such importations, and in case these importations did not comply with the regulations, that proper steps be taken to reprimand any officials who are not properly enforcing the regulations, and that every effort be made to prevent a repetition of such importations.

MINIMUM VALUATION OF HORSES.

The question of the minimum valuation of \$50 on horses being imported from the United States was discussed, and it was the general opinion that owing to the increased value of horses during the past few years, that the minimum valuation should be raised from \$50 to \$100, and that the valuation of \$100 would now have practically the same effect as the valuation of \$50 had at the time it was put into force. The following resolution was unanimously passed and forwarded with the above resolution to the Minister of Customs and the Veterinary General at Ottawa:

That in view of the increase in the value of horses during the past few years, and to prevent the importation of undesirable horses to Canada, the minimum valuation on horses being imported from the United States to Canada should be increased from \$50 to \$100 per head.

The question of the increase in the minimum valuation will be brought to the attention of the proposed tariff commission, and the matter of the importation of inferior stock above referred to is now being thoroughly investigated, and a repetition of such an occurrence will no doubt be prevented in the event of this shipment having been imported contrary to the regulations. After the matter had been taken up by Dr. J. G. Rutherford, Live Stock Commissioner, he replied as follows:

Ottawa, March 20th, 1912.

DEAR SIR,—I beg to refer further to my letter of March 11th with regard to some recent importations of horses which have entered Alberta from the United States, and with special reference to sale of horses, some of which were alleged to be unbroken, recently held at Calgary.

In this connection I would say that I am now in receipt of the reports of the inspectors of this branch in Alberta with regard to these animals. I find that twenty-one ears of horses and colts were, sometime previous to their final admission to Canada, presented for entry at the port of Coultts, but, owing to the fact that the boundary inspector at that point was confined to his house with a broken leg, and there being no other inspector available at the time, the animals were trailed to Twin Lakes, where they were inspected and passed on February 21st and 22nd.

Our inspector at that port reports as being satisfied that all the adult animals were sufficiently gentle to enable him to examine them carefully, or submit them to the mallein test if necessary, and the immature animals were also sufficiently gentle for this purpose.

The inspector of this branch at Calgary, who examined the animals in the stock yards there prior to the sale, reports that, with the exception of eighty-one foals and a number of immature animals, this consignment appeared to be gentle and exhibited harness or saddle marks, or other evidence that they had been handled at some time.

Dr. Hargrave of Medicine Hat, the officer in charge of the work of this branch, in Alberta, who examined such of the animals as remained in the stock yards after the sale, reports that, with the exception of the young animals in the bunch, all appeared to be broken, and that he has no doubt but that the entire consignment was in strict accordance with section 33 of the regulations. It would not therefore, appear necessary that any further action in this connection is necessary on the part of this department.

Yours faithfully,

(Sgd.) J. G. RUTHERFORD,
Veterinary Director-General.

NATIONAL LIVE STOCK CONVENTION.

A convention of the National Live Stock Association of Canada was called at Ottawa on February 12 and 13. The Alberta Live Stock Associations were represented by thirteen delegates. President Geo. Lane, Dr. Hargrave, John A. Turner, Baron Geo. Roels, O. E. Brown, and your secretary being present from the directorate of the Alberta Horse Breeders' Association. The convention has in the past been held every four years, and an effort is being made to have the convention held every other year in the future, and to have meetings of the directorate every year so that the matters of importance may be dealt with more promptly, and the breeders of the Dominion of Canada may be kept in closer touch with each other.

With the continued marvellous development of this province, and the large amount of railway construction, a good horse market is assured for Alberta horse breeders for a number of years to come. Large importations of purebred horses have been made during the year, principally from the British Isles, the United States and France, and the outlook is bright for the horse breeding industry.

NEW HORSE SHOW BUILDING.

The success the Alberta Horse Breeders' Association have made of the Provincial Spring Horse Show held annually for the past ten years, has resulted in a splendid new horse show building being erected during the year at Victoria Park. The building was erected by the Industrial Exhibition Company with funds provided by the citizens of the city. The building cost slightly over \$50,000, is 130 feet wide by 300 feet long, has a judging arena 84 feet by 220 feet, a promenade six and a half feet wide around the judging arena, and has seating accommodation for 2,600 visitors. Almost as many more may be accommodated in the promenade. The bandstand is suspended from the roof about 35 feet from the ground. The building is lighted with 72 250-watt tungsten lights, is heated with four large hot air furnaces, has a commodious entrance, a ladies' dressing room, a smoking room, lavatories, and a gas hot water heating plant to provide hot water for exhibitors. Immediately adjoining the building a hitching floor 80 feet by 110 feet has been provided, costing \$4,500. The entrance for exhibits opens into the horse show building from the hitching floor, and a separate exit is also provided for exhibits. Twenty-five large stables are located close to the horse show building. The Alberta Horse Breeders' Association is now in the best position in its history to provide for the comfort of exhibitors and visitors to the annual show.

Respectfully submitted,

E. L. RICHARDSON,
Secretary.

APPENDIX B.

ALBERTA CATTLE BREEDERS' ASSOCIATION.

TWELFTH ANNUAL REPORT.

HON. DUNCAN MARSHALL,
Minister of Agriculture.

SIR,—I have the honour to submit herewith the twelfth annual report of the proceedings of the Alberta Cattle Breeders' Association for the year 1911.

The annual meeting was held in the horse show building, Calgary, April 8th, 1912.

MINUTES OF ANNUAL MEETING.

The president, Mr. J. L. Walters, in the chair.

The minutes of the last annual meeting were adopted as read.

The manager presented the annual report and financial statement for the year.

Moved by Mr. Bryce Wright (De Winton), seconded by Mr. John A. Turner (Calgary),—

That the reports be adopted. Carried.

Mr. Walters brought up the question of a proper system of brand inspection, and called on Mr. Usher, representing the Central Stock Growers' Association, to address the meeting. He referred to the frequency with which brand certificates are given without any inspection, and stated that wrong brands were sometimes given in order to have the cattle passed. He referred to a recent shipment from the north eastern part of the province to Calgary which had been passed by the inspector, certificates had been given and the animals afterwards sold and slaughtered, although the animals were said to have been stolen from a field and as a result of their not being actually inspected the irregularity was not detected before shipment. He explained that after the practical stockmen of the Central Stock Growers' Association had thoroughly discussed the matter they had come to the conclusion that it was difficult to suggest an improvement to the brand inspection regulations if they were properly carried out, and it was suggested that a chief brand inspector be appointed whose duty it would be to go from point to point and instruct and assist inspectors, and to prevent the inspectors from granting brand certificates without actually having inspected the stock.

Mr. Whiteside, another representative of the Central Stock Growers' Association, who arrived after Mr. Usher had spoken, dealt with the matter along similar lines. The Hon. Duncan Marshall, Minister of Agriculture, who came to the meeting immediately on arrival of his train, added a few remarks in which he stated that the trouble was more with the system than with the inspectors. He explained that it was very difficult to get brand inspectors who had sufficient experience in reading brands to make their work effective, as it was almost an impossibility for any inspector, particularly if the inspector had not a very wide experience in connection with reading brands, to properly inspect large numbers of cattle as they were being driven past him into the cars. He explained that the department was very glad to have the co-operation of the various associations to suggest improvements to the present system. His department would be willing to spend a reasonable amount of money to endeavour to have a proper system inaugurated. Mr. Marshall suggested that a committee consisting of two representatives each from the Alberta Horse Breeders' Association, the Alberta Cattle Breeders' Association, the Western Stock Growers' Association and the Central Stock Growers' Association, meet himself and Mr. Harcourt, Deputy Minister of Agriculture, go thoroughly into the matter and draft the best possible regulations which could be submitted to the next session of the legislature. This suggestion was accepted and on motion of Mr. Hutchinson, seconded by Mr. Tees, it was decided to appoint a committee of two to act with the other association delegates in connection with forming improved brand inspection regulations.

Moved by Mr. Hutchinson, seconded by Mr. Richards,—

That Messrs. Walters and Tees be the members of the committee referred to. Carried.

Mr. Usher then pointed out that this suggestion of the committee was very good, but as the regulations could not in this way be changed until after the next session of the legislature, and in the meantime another cattle crop would have been shipped, he suggested that some arrangement be made with Mr. Saunders, Brand Inspector, to inspect all cattle coming into Calgary. Mr. Harcourt, Deputy Minister of Agriculture, explained that Chief Inspector Saunders was at the present time inspecting all stock coming into Calgary, but that this was rather more than could be expected of one man. The various committees, therefore, arranged to meet Mr. Saunders during the week, and see if they could not together arrange for some improvement which would be effective for this season's shipping.

THE MINISTER'S ADDRESS.

The Minister of Agriculture was then asked to address the meeting. Mr. Marshall stated that he was pleased so many wheat farmers were gradually becoming interested in dairying and cattle raising. This showed that the necessity of going into mixed farming and cattle raising, instead of straight wheat farming, was generally recognized. He mentioned the fact that a banker had recently told a farmer that he would be pleased to lend him money to buy cattle, but would not lend money on grain. He explained that he had recently returned from the east where arrangements had been made for some grade dairy cattle to be purchased, and which would be placed on the demonstration farms and sold to the farmers at actual cost. The Canadian Pacific Railway Company were co-operating with his department in this matter, and supplying free transportation. He did not wish to compete with the breeders of purebred bulls, but he believed that the importation of good dairy cattle would undoubtedly stimulate the demand for purebred sires. Mr. Marshall explained that he had noticed a very considerable increase in the price of cattle in the East at the present time and prices a few years ago, which was an encouragement to the Western farmer to go into the cattle business more extensively. His department was willing and anxious to do all in their power to improve general conditions in connection with the cattle business of Alberta.

ELECTION OF OFFICERS.

The election of officers was then proceeded with and resulted as follows:

Hon. President	John A. Turner, Calgary.
President	J. L. Walters, Clive.
Vice-President	Wm. Sharp, Lacombe.
Second Vice-President	Bryce Wright, De Winton.

BREED DIRECTORS.

Shorthorns	P. A. Switzer, Lacombe.
Herefords	P. F. Huntley, Lacombe.
Aberdeen Angus	Lew Hutchinson, Duhamel.
Galloways	W. E. Tees, Lacombe.
Holsteins	Thos. Laycock, Calgary.
Ayrshires	A. H. Trimble, Red Deer.
Jerseys	C. A. J. Sharman, Red Deer.

GENERAL DIRECTORS.

S. M. Mace	Pekisko.
W. P. Williams	Fort Saskatchewan.
Thos. Baird	Red Willow.
W. T. G. McClure	Innisfail.
Prof. W. J. Elliott	Strathmore.

Moved by W. J. Watson, seconded by Mr. Tees,—

That W. J. Watson, Calgary, be the auditor for the ensuing year. Carried.

It was pointed out at the meeting that owing to the probable increase to the fat stock show entries from outside of Alberta, the meeting would recommend to the Fat Stock Show Committee that duplicate classes be given for Alberta bred animals if possible.

The meeting then adjourned.

ANNUAL REPORT OF THE SECRETARY.

GENTLEMEN,—I beg to submit herewith the twelfth annual report of the Alberta Cattle Breeders' Association being for the year 1911-12.

The last auction sale held at Calgary was among the most successful yet held by the association. Eighty-five bulls were sold for \$8,362 or an average of \$98.39. Only on three previous occasions was this average exceeded. Nine Aberdeen Angus bulls obtained the largest average price which was \$108.88. The Shorthorns came next, fifty being sold at an average price of \$103.24. The next in order were Galloways, Herefords and Ayrshires. The general quality of the animals was good, and it was pleasing to note the smaller percentage of animals which were not a credit to the sale. The quality of the animals offered at the sale is undoubtedly improving each year.

Considerable financial loss was shown on the year's business as a result of the increase in the cost of paying the freight for the delivery of the stock. The amount of transportation fees collected being \$725.47, whereas, the amount we had to pay out to the railway companies was \$1,085.33, showing a loss of \$360.00. A comparative statement is given below of the sales held under the auspices of the associations. It is very pleasing to note that these sales are continuing to be so successful, and are undoubtedly being a most convenient means of exchange of stock between the breeder and the purchaser.

DEPARTMENT OF AGRICULTURE

YEAR	Total Number	Average Price	Total Receipts	SHORTHORNS		HEREFORDS		GALLOWAYS		AYRSHIRES		ABERDEEN ANGUS		HOLSTEINS	
				No.	Ave	No.	Ave.	No.	Ave.	No.	Ave.	No.	Ave.	No.	Ave.
1901	64	\$ 85.17	\$5,451.00	44	\$90.57	14	...	1	...	3	...	1	\$45.00		
1902	220	95.80	21,077.00	183	99.91	19	\$91.42	1	...	1	\$51.30	2	72.50		
1903	268	96.60	25,890.00	173	93.65	76	135.00	7	...		15.00	9	83.33		
1904	293	99.79	29,245.00	131	104.23	93	127.17	5	40.71			5	107.00		
1905	340	69.28	23,587.00	173	67.84	37	76.21	2	64.00			4	62.50		
1906	170	108.37	18,426.50	95	106.12	37	138.91	1	165.00			6	139.16		
1907	192	75.72	14,538.50	132	74.64	50	79.54	1	55.00			9	72.67		
1908	111	63.91	7,095.00	67	64.28	37	64.80	1	50.00			6	56.66		
1909	59	107.37	6,325.00	41	108.17*	13	101.15	1	90.00			4	121.25		
1909	58	82.50	4,785.00	31	91.61†	12	70.00		...			11	79.55		
1910	104	96.48	10,035.00	68	91.98*	20	110.50	2	70.00			14	102.14		
1910	57	90.46	5,156.50	38	97.08†	5	111.00	1	...			5	75.00		
1911	85	98.39	8,362.00	50	103.24*	22	87.04	1	95.00			9	108.88		
1911	55	99.50	5,521.00	42	105.14†	9	78.33		...			3	108.33		
														3	\$76.66

*Calgary. †Lacombe.

HIGHEST PRICES REALIZED.

1901.—\$250.	Shorthorn bull sold by P. Talbot & Son, Lacombe.
1902.—\$290.	Shorthorn bull sold by John Ramsay, Priddis.
1903.—\$255.	Hereford bull, sold by O. Palmer, Lacombe.
1904.—\$285.	Shorthorn bull, sold by Hon. W. Beresford, Calgary.
1905.—\$225.	Shorthorn bull, sold by D. Sinclair, Innsfail.
1906.—\$365.	Shorthorn bull, sold by A. F. McGill, Lacombe.
1907.—\$170.	Shorthorn bull, sold by James Sharp, Lacombe.
1908.—\$400.	Shorthorn bull, sold by John A. Turner, Calgary.
Calgary, 1909	{ \$180. Shorthorn bull, sold by Bryce Wright, De Winton.
	{ \$180. Shorthorn bull, sold by Wm. Sharpe, Lacombe.
	{ \$150. Shorthorn bull, sold by Thos. Talbot, Lacombe.
Lacombe, 1909	{ \$150. Aberdeen Angus bull, sold by R. E. Johnston, Lacombe.
	{ \$150. Aberdeen Angus bull, sold by J. H. Fay, Blackfalds.
Calgary, 1910	\$205. Shorthorn bull, sold by Jas. A. Hogge, Okotoks.
Lacombe, 1910	\$200. Shorthorn bull, sold by Wm. Sharp, Lacombe.
Calgary, 1911	\$185. Shorthorn bull, sold by Wm. Sharp, Lacombe.
Lacombe, 1911	\$165. Shorthorn bull, sold by Wm. Sharp, Lacombe.

THIRD ANNUAL SALE HELD AT LACOMBE.

The last sale held at Lacombe was the most successful yet held. the average price being \$99.50. The number of bulls sold was 55. Three Aberdeen Angus obtained the average of \$108.33 which was the highest at that sale. Next came the Shorthorns, 42 of which were sold for an average of \$105.14. Nine Herefords were sold at an average of \$78.33, and one Ayrshire for \$75.00. Comparative prices of the Lacombe sale are included in the statement given above.

NATIONAL LIVE STOCK CONVENTION.

Your president, J. L. Walters, Vice-President Wm. Sharp, and your secretary attended the National Live Stock Convention at Ottawa on February 12th and 13th, 1912, together with ten other Alberta Live Stock Association representatives. During the convention an effort was made so that future conventions would be held every two years instead of every four years. The suggestion will, it is hoped, be adopted, and live stock breeders generally will be given a better opportunity of keeping in touch with each other, and dealing with matters of interest to them. Suggestions were also made that the directors of the National Association meet annually so as to take up questions requiring attention more promptly than has been possible in the past.

NEW SPECIAL LIVE STOCK CONTRACT.

A special live stock contract was prepared by the railway companies to be submitted to the railway commission. This contract would have taken the place of the contract that is now being used by the railway companies for the shipping of live stock. The proposed new contract contains certain clauses which were considered very unfair by the live stock shippers. The Alberta Cattle Breeders' Association in conjunction with the other Provincial Live Stock Associations of Alberta and of the other provinces of the Dominion, the Canadian Manufacturers' Association, and the live stock shippers, took united action to see that any contract accepted by the railway commission would be a reasonable one. Several meetings of live stock representatives were held in Toronto during December last, the Cattle Breeders' Association being represented by Live Stock Commissioner W. F. Stevens and Chas. S. Hotchkiss of the Depart-

ment of Agriculture, Edmonton. Meetings were also held with the railway officials, and some progress was made towards an equitable agreement. The committee of live stock breeders still have the matter in hand, and it is probable that the railway commission will take evidence on this subject throughout the Dominion before it is finally disposed of.

FUTURE PROSPECTS FOR THE LIVE STOCK INDUSTRY.

Although the cutting up of the ranges particularly those located fairly close to railways, is resulting in the large cattle ranchers being closed out, I believe there is no reason to doubt that the cattle being raised annually on the farms, and the very considerable amount of breeding stock being brought in annually by settlers, will keep pace with the production of live stock in Alberta, and each year show an increase. There are many who believe that as a result of the cutting up of the large cattle ranches, a very considerable annual decrease will be shown in the cattle stock of the province. I am of the opinion that those who take this view do not realize what a large number of small herds are being established each year, and the number of breeding animals which are being imported by new settlers. The price on beef will no doubt continue to be very satisfactory, and the outlook for the breeders of cattle is and will continue to be bright.

Following is a list of prize winners at the 1911 Purebred Cattle Show held at Calgary in connection with the auction sale of bulls:

CLASS I.—SHORTHORN BULLS.

Three years and over.

1st	Sir Henry 2nd, 69056.	Wm. Anderson, De Winton.
2nd	Antler View Favorite, 72235.	John Duncan, Innisfail.
3rd	Lord Ailsa, 71315	James Scarlett, Innisfail.
4th	Heirloom, 69629	W. F. Moran, Innisfail.
5th	Mack, 73080	A. S. Fowler, High River.

Thirty months and under three years.

1st	Valentine, 80043.	A. W. Latimer, Bowden.
2nd	Western Remus, 72977	Norman Harris.

Two years and under thirty months.

1st	Jaspar, 81173.	Wm. Sharp, Lacombe.
2nd	Roan Duke, 79382.	D. Sinclair, Innisfail.
3rd	Scotch Lad, 81611	J. L. Walters, Clive.
4th	Victor, 81609.	J. L. Walters, Clive.
5th	Village Hero, 79380	D. Sinclair, Innisfail.

Eighteen months and under two years.

1st	Janitor, 81171.	Wm. Sharp, Lacombe.
2nd	Justice, 81177	Wm. Sharp, Lacombe.
3rd	Andrew, 81613.	J. L. Walters, Clive.
4th	Jack, 81610.	J. L. Walters, Clive.

Yearlings and under eighteen months.

1st	Julian, 81169.	Wm. Sharp, Lacombe.
2nd	Lavender Ury.	Bryce Wright, De Winton.
3rd	Prince Ury.	Bryce Wright, De Winton.
4th	Farmers Boy, 80850.	A. H. Bolton, Gladys.
5th	Ury Fashion.	Bryce Wright, De Winton.

Best Shorthorn bull, any age, bred in Alberta.

Jaspar. Wm. Sharp, Lacombe.

Special offered by Canadian Bank of Commerce for best Shorthorn bull, any age.

Jaspar. Wm. Sharp, Lacombe.

CLASS II.—HEREFORD BULLS.

Three years and over.

2nd Hero, 10116. A. Fletcher, Mound.

Thirty months and under three years.

1st Diamonds Pride. Thos. Baird, Red Willow.
2nd Freestone. Thos. Baird, Red Willow.

Two years and under thirty months.

1st Hamburg, 9450. S. M. Mace, Pekisko.
2nd Darby 9939. P. F. Huntley, Onion Lake.
3rd Alberta Hesiod, 12th. O. Palmer, Lacombe.
4th Alberta Hesiod, 10th. O. Palmer, Lacombe.

Eighteen months and under two years.

1st Duke, 10017. A. Fletcher, Mound.
2nd Sidney, 10016. A. Fletcher, Mound.
3rd Dago, 9938. P. F. Huntley, Onion Lake.
4th Alberta Hesiod 2nd. O. Palmer, Lacombe.
5th Dandy, 9941. P. F. Huntley, Onion Lake.

Yearlings and under eighteen months.

1st Alberta Hesiod 23rd, 9738. O. Palmer, Lacombe.
2nd Dick 9940. P. F. Huntley, Onion Lake.

Best Hereford Bull, any age.

Hamburg, 9450. S. M. Mace, Pekisko.

CLASS III.—ABERDEEN ANGUS BULLS.

Two years.

1st Wildwood Gaylawn 2nd, 3705. G. G. Melson, Olds.
2nd Kenneth, 3708. W. T. G. McClure, Innisfail.

Under two years.

1st Caledonia, 3789. W. T. G. McClure, Innisfail.
2nd Dundee, 4061. W. T. G. McClure, Innisfail.
3rd Wildwood Gaylawn 8th, 5188. W. T. G. McClure, Innisfail.
4th Wildwood Gaylawn 6th, 4186. W. T. G. McClure, Innisfail.
5th Wildwood Gaylawn 7th, 4187. W. T. G. McClure, Innisfail.

Best Angus Bull, any age, bred in Alberta.

Caledonia. W. T. G. McClure, Innisfail.

Best Angus bull, any age.

Caledonia. W. T. G. McClure, Innisfail.

CLASS IV.—GALLOWAYS.

Two years.

1st Duke of Tees, 1786. W. E. Tees, Lacombe.

Best Galloway bull, any age, bred in Alberta.

Duke of Tees. W. E. Tees, Lacombe.

Best Galloway bull, any age.

Duke of Tees W. E. Tees, Lacombe.

CLASS V.—HOLSTEINS.

Three years and over.

1st Dora's King, 6541. A. Von Mielecki, Calgary.

Best Holstein Bull, any age.

Dora's King. A. Von Mielecki, Calgary.

CLASS VI.—AYRSHIRES.

Three years and over.

1st Neidpath Star, 27845 . . . O. M. Forham, Red Deer.

Under three years.

1st Sandy of Lone Spruce, 30963. . . A. H. Trimble, Red Deer.

2nd Guarantee's Rejected, 29549 . . . E. W. Bjorkeland & Sons, Red Deer.

3rd Glen of Lone Spruce, 30646. . . A. H. Trimble, Red Deer.

Best Ayrshire bull, any age.

Neidpath Star O. M. Forham, Red Deer.

FAT STOCK SHOW.

The fat stock show was held as usual in conjunction with the auction sale of cattle. The awards were made by Mr. Duncan Anderson, of Rigby, Ont. The awards in the dressed carcass competition were placed by Mr. O. F. Bruner of Strathmore, Alta. There were 157 entries in the fat stock show. Owing to the other events of the associations, namely, the horse show and the auction sale of cattle taking up such a large amount of the time of the breeders and those who would be interested in the fat stock show, it has been found difficult to work up the interest in the fat stock show which it is believed would be possible were the show held at another time in the year. The matter of a change of date for the fat stock show has been carefully considered by the executive committees of the various associations, and it is their unanimous opinion that the fat stock show should be held each year the latter part of November or early in December at the time of the poultry show at Calgary. It is expected therefore that the next show will be held about the first of December in 1912, and that the fat stock show will develop very rapidly. If this change is made there will be sufficient time for instructive lectures and other special features which will add greatly to the good which the fat stock show will be to the province.

Following is a list of the prize winners in the cattle classes at the Alberta Provincial Fat Stock Show.

PUREBRED SHORTHORNS.

Steer or heifer, two years old and under three.

1st White Rose. . . J. L. Walters, Clive.

*Steer or heifer under two years.*1st Sir John Thompson . . J. L. Walters, Clive.
2nd Lydia . . J. L. Walters, Clive.

PUREBRED GALLOWAYS.

Steer three years old and under four, cow or heifer three years old and under six.

2nd Molly of Tees . . . W. E. Tees, Lacombe.

Steer or heifer two years and under three.

1st Black Joe . . . W. E. Tees, Lacombe.

Steer or heifer under two years.

Beauty of Tees. . . W. E. Tees, Lacombe.

GRADES.

*Three years old and under four.*1st Jeff . . P. F. Huntley, Onion Lake.
2nd . . W. E. Tees, Lacombe.
3rd Bill . . J. A. McLaughlin.
4th . . Thos. Croxford, Airdrie.*Two years old and under three.*1st . . Thos. Croxford, Airdrie.
2nd . . A. F. McGill, Clive.
3rd Knight Errant . . Lew Hutchinson, Duhamel.
4th Rogers . . Lew Hutchinson, Duhamel.*Under two years.*

1st . . W. E. Tees, Lacombe.

Cow or heifer three years old and under six.

1st Daisy . . A. H. Bolton, Gladys.

*Heifer two years and under three.*1st Adventuress . . Lew Hutchinson, Duhamel.
2nd . . W. E. Tees, Lacombe.
3rd . . Thos. Croxford, Airdrie.*Heifer under two years.*

3rd . . Thos. Croxford, Airdrie.

SPECIAL BY THE CANADIAN ABERDEEN ANGUS ASSOCIATION.

*For Grade steer or heifer, sired by an Aberdeen Angus bull, registered in the Canadian Aberdeen Angus Record.*1st Knight Errant . . Lew Hutchinson, Duhamel.
2nd Adventuress . . Lew Hutchinson, Duhamel.
3rd Bogus. . . Lew Hutchinson, Duhamel.

CARLOAD OF FAT CATTLE

1st J. Riot . . Davisburg.
2nd W. E. Tees . . Tees.

DEPARTMENT OF AGRICULTURE

CARLOAD, OPEN TO ALL.

1st	P. Burns & Co..	Calgary.
2nd	J. Riou ..	Davisburg.

CHAMPION BEEF ANIMAL.

Jeff...	P. F. Huntley, Onion Lake.
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DRESSED CARCASSES.

Purebred or grade steer.

1st	Thos. Croxford..	Airdrie.
2nd	Thos. Croxford..	Airdrie.
3rd	W. E. Tees....	Lacombe.
4th	Lew Hutchinson..	Duhamel.

Purebred or grade cow or heifer.

1st	Lew Hutchinson.	Duhamel.
2nd	J. L. Walters..	Clive.
3rd	Thos. Croxford.	Airdrie.
4th	Thos. Croxford.	Airdrie.

CLASS VII.—HERDSMAN'S COMPETITION.

Feeder of the champion beef animal.

P. F. Huntley..	Onion Lake.
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Feeder of the best female dressed carcass.

Lew Hutchinson....	Duhamel.
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Feeder of the best dressed carcass.

Thos. Croxford..	Airdrie.
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DRESSED CARCASS COMPETITION.

STEERS.

OWNER	Live Weight	Dressed Weight	Yield %	Shrunk Weight	Price per lb.	TOTAL
Thos. Croxford (1st prize)..	1,465	920	62.79	910	15c	\$136.50
Thos. Croxford	1,310	835	63.74	830	11c	91.30
Thos. Croxford (2nd prize).	1,160	740	63.79	705	13½c	95.17
Thos. Croxford.	1,200	770	64.16	765	11c	84.15
Lew Hutchinson.	1,140	690	60.52	680	11c	74.80
Lew Hutchinson (4th prize)..	1,250	790	63.20	790	11c	86.90
P. F. Huntley	1,600	1,005	62.18	1,000	11c	110.00
A. F. McGill..	1,275	760	59.60	747	11c	82.17
S. M. Mace.	1,040	660	63.46	645	11c	70.95
S. M. Mace	1,150	705	61.30	695	11c	76.45
Thos. Talbot	1,290	805	62.40	795	11c	87.45
Thos. Talbot.	1,215	732	60.24	732	11c	80.52
W. E. Tees (3rd prize)	1,175	745	63.40	735	12½c	91.87

COWS.

Thos. Croxford (4th prize).	880	535	60.79	530	10c	53.00
Thos. Croxford [3rd Prize]	800	488	61.00	482	11½c	55.43
Thos. Croxford.....	835	510	61.07	505	10c	50.50
Lew Hutchinson (1st prize).	1,180	730	61.86	730	14c	102.20
W. E. Tees.	960	560	58.33	550	10c	55.00
J. L. Walters (2nd prize).	1,210	773	63.88	762	12½c	95.25
A. H. Bolton	1,270	698	54.96	685	10c	68.50

I have pleasure in attaching hereto a copy of the financial statement showing the receipts and expenditures for the year 1911, which have been audited and found correct by the official auditor of the Alberta Live Stock Associations.

FINANCIAL STATEMENT OF THE ALBERTA CATTLE BREEDERS' ASSOCIATION, 1911.

Receipts.

Proceeds of sale	\$13,888 00
Grant by Alberta Department of Agriculture	1,200 00
Subscription by Canadian Bank of Commerce	25 00
Transportation fees	725 47
Commissions on sales	338 65
Entry fees	332 00
Membership fees	85 00
Advertising receipts	16 25
Refunds and sundries	68 15
Overdraft 31st December, 1911	651 57
	<hr/>
	\$17,330 09

Disbursements.

Proceeds of sales	\$13,888 00
Freight charges	1,085 33
Postage, stationery and office expense	551 12
Secretary's salary	500 00
Grounds expense and extra help	330 05
Prizes	287 04
Sundries	54 05
Printing and advertising	358 76
Overdraft of 1910 carried forward	275 74
	<hr/>
	\$17,330 09

ALBERTA PROVINCIAL FAT STOCK SHOW.

Receipts.

Balance on hand 31st December, 1911	\$ 54 00
Grant by Alberta Department of Agriculture	1,400 00
Grant by Dominion Department of Agriculture	216 66
Grant by Canadian Aberdeen Angus Association	50 00
Grant by Swift Canadian Co	25 00
Entry fees and exchange	154 65
Freight fees	91 00
Overdraft December 31st, 1911	62 98
	<hr/>
	\$2,054 49

Expenditure.

Office and grounds expense	\$ 377 68
Secretary's salary	100 00
Prizes	1,293 00
Freight charges	136 05
Printing and advertising	137 76
Refund of entry fees collected twice	10 00
	<hr/>
	\$2,054 49

Audited and found correct, March 7th, 1912.

(Sgd) F. R. EXHAM,
Auditor.

It is evident that the revenue of the association must be increased. The loss sustained by the association in connection with the shipment of the cattle to and from the sales was \$360 in 1911. This is a considerable item, and is increasing since the association has been holding two sales annually, and has to ship animals to and from a large number of stations in Alberta twice a year instead of once. The number of small and expensive shipments has increased, and we have fewer carload shipments.

In closing I wish to thank the Dominion and Alberta Departments of Agriculture for financial assistance and co-operation during the past year.

Respectfully submitted,

E. L. RICHARDSON,
Secretary.

APPENDIX C.

SIXTH ANNUAL REPORT OF THE ALBERTA NATURAL HISTORY SOCIETY.

HON. DUNCAN MARSHALL,
Minister of Agriculture.

SIR,—I have the honour to submit herewith the sixth annual report of the Alberta Natural History Society for the year 1911.

The deferred annual meeting of the society for 1911 was held at Red Deer on April 19th, 1912, President Wm. Geary being in the chair.

The minutes of last annual meeting were read and adopted.

The president's annual address was then given, welcoming the members to the meeting. He then gave a verbal report of the work done in 1911. The year had been a quiet one as far as the formation of new societies and the undertaking of new work was concerned.

The four branches in operation were Innisfail, Red Deer, Edmonton and Erskine. It was hoped soon to have branches at Ponoka and Camrose. Correspondence with interested parties in these places was in progress to that end. There were also good prospects for a branch being formed at Banff.

During the year an interesting communication was received from Mr. W. M. Fleming of Flagstaff containing notes of bird migration as noticed at that point.

Verbal reports were also given by Mr. Geary on behalf of the Innisfail branch, stating that monthly meetings had been held until July, but not regularly since then owing to removal of members from the town. There were, however, a number of prospective new members and the society would be reorganized. The branch possessed the nucleus of a valuable library of natural history for the use of the members.

Mrs. S. S. Judd of Erskine reported on behalf of that branch that the society had been somewhat dormant, but plans for reorganizing were under way.

Dr. George reported on behalf of the Red Deer branch that monthly meetings were being held with much profit to the members.

SECRETARY-TREASURER'S REPORT.

The secretary-treasurer's financial statement was read as follows:

Receipts.

To balance on hand.....	\$27.90
" Grant to Society, 1910..	100.00
" Grant to Society, 1911..	100.00
" T. B. Potter, fee.....	.50
" Rev. J.S. Shortt, fee..	.50
	<hr/> \$228.90

Expenditure.

By Grant to Edmonton branch	\$10.00
" Mrs. Ellis (meals)..	4.50
" Grant to Erskine branch.	10.00
" Printing cards.....	3.50
" A. L. Good, typewriting.....	3.00
" Postcards.....	.25
" Expenses of N. B. Samson to annual meeting...	10.06
" Expenses of Mrs. S. S. Judd to annual meeting...	5.00
" Expenses of Mr. and Mrs. Geary to annual meeting..	2.00
" Expenses of Rev. J. S. Shortt to annual meeting.	1.00
" Expenses of Mrs. Keast to annual meeting..	1.00
" Expenses of banquet.....	19.15
" Grant to Red Deer branch, 1911.	10.00
" Grant to Erskine branch, 1911..	10.00
" Balance on hand.....	139.44
	<hr/> \$228.90

ELECTION OF OFFICERS.

Hon. President, Hon. Duncan Marshall; Hon. Vice-President, George Harcourt; President, Dr. H. George, Red Deer; Vice-Presidents, Mrs. G. W. Greene, Red Deer; Mrs. W. Geary, Innisfail; and F. S. Carr, Edmonton; Secretary-Treasurer, Rev. J. S. Shortt, Innisfail.

EXECUTIVE COMMITTEE.

J. Jenson, Innisfail; W. B. Sanson, Banff; Mrs. George, Red Deer; Mrs. Wanless, Red Deer; Mrs. Keast, Innisfail; Mrs. Talman, Red Deer; R. E. Fiske, Hillsdown; Mrs. Cottingham, Red Deer; Mrs. Morton, Erskine, together with branch presidents.

REV. J. S. SHORTT,
Secretary-Treasurer.

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